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HAST SEEN THE WHITE WHALE?

bout a year back I devoted one of these columns to a report on the migrations of the West Coast's gray whales—how my wife and I went out in a chartered boat off the Northern California coast to watch the barnacled behemoths make their annual nilgrimage to their winter spawning-grounds in Baja California, I wrote then of how the trip provided us with "that grand sense of knowing that We Are Not Alone on this world, that we share it with some noble and astonishing warmblooded creatures of great size and, apparently, high intelligence." And I expressed my pleasure at the fact that a ban on hunting these magnificent maritime mammals, enacted in 1937, had brought the gray whales back from the brink of extinction just in the nick of time

Some months later I watched the recent television adaptation of Melville's Moby Dick, in which Star Trek's own Patrick Stewart once again plays skipper. (But Captain Ahab, I tell you truly, is a very different kettle of fish from Captain Picard.) And that led me back to the book itself, which I had not read since my college days in the 1950s. I've been doing a lot of re-exploring of my college reading lists lately-Homer, Cervantes, Rabelais, Stendhal, Sophocles, Herodotus, etc., etc .- on the general theory that one should return to the great books of the world again and again at various points in one's life, because they will interact with one's own experience in quite different ways over the span of decades, and one will find things in Don Quixote, say, at the age of sixty that one was simply not capable of noticing in one's earlier readings at the age of (in my case) twelve and again at twenty.

Moby Dick passed the test beautifully. Melville's resonant Shakespearean prose sounded as thunderous in my mind last month as it did in my first encounter with it during the Eisenhower administration; Starbuck, Queequeg, Stubb, and the rest of that bunch came thoroughly alive for me; the long passages on the natural history of whales that occupy the entire central third of the book, which I recall as causing my youthful self some impatience, held me enthralled this time around. Ahab himself seemed a far richer character than I remembered him to be-not just a wild-eved monomaniac, though he certainly is that, but also a complex and profound figure of great visionary intensity, one who would have been worthy of the creator of Lear and Macbeth and Richard III

And the biggest difference of all: When I read the book in 1953, I don't think I stopped at all to meditate on the fate of the whales. To my youthful mind, as to Melville's whalers, they were just big critters there to be hunted, hauled on board, and quickly reduced to bone and blubber. Though Melville himself certainly does allow that they are superb creatures, much to be admired, he offers not a word of regret over the necessity of hunting them, and his descriptions of the transformation of living whale into so many barrels of profitable product are as matter-of-fact as an account of the Chicago stockvards. That didn't

bother me when I was young. But now-although, as regular readers of this column will know. I am far from being your basic bleeding-heart liberal, and am troubled by what has happened to college reading lists in the name of political correctness-I found myself anachronistically aghast over the cheerful bloodiness of the whale-slaughtering that lies at the heart of the novel. In the last three decades or so I have become, as have we all, every bit as opposed to the killing of whales as any Greenpeace lovalist, and I could not help shuddering, from time to time, at the realization that this wonderful novel is all about that very thing. It didn't interfere with my appreciation for the book, but it caused me moments of moral confusion along the way.

Well, in fact not much killing of whales goes on anywhere any more, except by the Norwegians and the Japanese. The International Whaling Commission proclaimed a moratorium on commercial whale-hunting about fifteen years ago. The Norwegians have simply ignored it; the Japanese, who find whale meat tasty, kill hundreds of whales a year for what they call "scientific purposes." But no one else does, and certain protected whale species, like the gray whales of the California coast. are left untouched even by the Norwegians and the Japanese.

Now, though, the Makah, a tribe of some two thousand American Indians living on a twenty-seven-thousand-acre reservation in the State of Washington, have wangled an exception to the international whale-protection program. The gray whales are no longer an endangered species, and the Makah, who are worried about the problem of maintaining their cultural identity in an increasingly homogeneous world, want to go out and kill four or five grays a year as a way of staying in touch with their ancestral ways.

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The Makah don't want the whales for their meat. It's seventy years since the tribe last hunted whales, and they've found other things to eat in the interim. This is purely a ceremonial thing. Tribal activists have been busy studying the ancient whale-killing rituals of their ancestors, the costumes and dances and such, and are eager to revive them. "We are a living culture, not a dead culture," says sixty-three-year-old John McCarty, the director of the Makah Whaling Commission, "We don't want to have to go to a museum to understand who we are."

He has a point, of course. The Zionist settlers who entered Palestine to create the State of Israel chose to revive the speaking of Hebrew, which had been a dead language for two thousand years, for much the same reason. But linguistic preferences are one thing and tossing harpoons at living creatures is something else again: just ask the whales. Or ask some of the Makah. for not all of them are eager to get into a battle with environmentalist groups over this, "Why are we going backwards, for all the backlash that it's going to cause?" asks Jesse Ides, a Makah elder. "It's not worth all the racism and hard feelings that are going to result. . . . I want the young people to be Makah proud, and this doesn't help." He suggests that his tribe would be a lot smarter going into the ecotourism business and taking visitors out to look at the whales instead of killing them. And others worry that the Makah, who have long ago forgotten their traditional whaling skills, will put themselves at serious risk when they go out in their canoes of hollowed-out cedar logs to attack the forty-footlong whales.

I see big ironies here. While environmental activists are coming forth to speak out against the plan, other equally liberal-minded advocates of cultural diversity have argued fervently in favor of the Makah's right to kill whales by way of getting back to their roots. What we have, then, is a clash of political correctnessescognitive dissonance for the virtuous folk who regard every whale's life as sacred, but not quite as sacred, it seems, as the customs of any thirdworld group that expresses an abstract need for ritual slaughter. As someone who lives in the heart of California p.c. country and is often annoyed by the excessive piousness of his neighbors, I suppose I should be amused at the squabble, but I'm not. The industry that employed Ahab and Ishmael is almost entirely out of business and good riddance to it; and the Makah, say I, should find some other and less gory way to commune with their ancestral folkways.

After all, where do we draw the line, once we start benignly looking the other way as our various impacted native minorities return to their roots? Would a little scalping be permissible? What about the human sacrifice that the Aztecs so prodigiously practiced? Would that be acceptable, say, if Mexican-American groups in Los Angeles or Corpus Christi called for its revival.

That's a reductio ad absurdum, you reply. Yes, indeed it is. But what's not so absurd is this: thirteen other Indian tribes in British Columbia have already let it be known that if the Makah are granted permission to start hunting gray whales, they will ask for the right to do it too. And you know that it won't end there.

Already we have the spectacle of great museums being forced to return Indian artifacts, legitimately acquired by purchase long ago, to tribes that claim them for ritual purposes. (And who often bury or otherwise destroy them once they reclaim them.) We have a tug of war going on in the Northwest over possing on the Northwest over possing the Northwest over p

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session of nine-thousand-year-old skeletal remains that may shed important light on the development of mankind in the New World but which local Indiane would like to nut back in the ground arguing that there are the hones of their an cestors, although the whole significance of the find seems to be that they are not And all around the nation Indian tribes however synthetically reconstituted, are allowed to operate gambling casinos that ordinary citizens are prevented by law from running. Can we, by the same kind of reasoning that has allowed all of this, tolerate the return to the Pacific of great platoons of Indian huntsmen to prev on what remains of the whale population?

I think we need to draw the line here. I'm a meat-eater myself and I hold no brief for the protection of cattle and pigs and chickens; but it's been amply shown that whales are intelligent life-forms perhans very intelligent, and there hasn't been an economic reason to hunt them in the century and a half since we learned how to refine netroleum I don't believe that we should let ourcalvae ha nuchad by quilt-driven modern political philosophies into permitting what we used to call a primitive" tribe, not so primitive any more but striving to get back there to act out its prohistory at the expense of remarkable animals whom nobody else is allowed to kill.

The whales can't be replaced once they're gone. Let the Makah find some other way to restore their tribal identity. Political correctness, for me, ends at the place where the point of the harpon enters the

whale. O



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William Barton

DOWN IN THE DARK

William Barton's latest book publications include Avon's September 1998 trade edition of White Light (written with Michael Capobianco), and Warner Aspect's 1998 mass-market edition of Acts of Conscience. The latter novel received a Special Phillip K. Dick Award for Excellence. The author's next book, When We Were Real, will be out from Warner in the spring. Mr. Barton's last story for us, "Age of Aquarius" (May 1996), was a finalist for the 1997 Hugo award.

Illustration by Alan Giana

esterday, August 4, 2057, was my fifty-third birthday. I don't think anyone noticed. No one said anything. Maybe birthdays don't count anymore. I sat in the half-track's cockpit, wearing my pressure suit, gloves off, hel-

met thrown back, steering by memory, as if caught in a dream, Four months. Four more months and I would've gone home, home to Lisa, whose letters said she was still waiting for me after all these years. But then the

world came to an end, and all that ended along with it.

Sometimes, when I'm asleep, I still see the ending itself, see the newsreels transmitted after the fact from Moonhase. Just a nickel-iron asteroid twentythree kilometers across, that's all. Knew about it for more than a year, they said, keeping it secret so there'd be no panic, making their plans in secret. carrying them off the same way.

Big rock like that, you'd think they'd've known about it for decades, but that long elliptical orbit, taking it out past Neptune . . . no number. No name

on it hut ours.

See those six bright flashes? Six thirty-year-old thermonuclear bombs going off, blowing the damned thing to bits. Now see the pretty pieces? Notice how they entrain and continue on their way? Twelve of them hit the Earth, one right after another, during the course of a long and interesting day. I imagined people, imagined my old friends, seeing those secret nuclear

flashes in the deep night sky, going, What the hell. . .

The biggest one hit the South Pole, coming in almost level, and damn if you couldn't see the West Antarctic ice sheet lift right off, breaking to a trillion glittery hits as it flew into orbit.

The last one came down dead square in the middle of North America, not far from Kansas City. Not far from my house, I kept imagining, hoping anyway, that Lisa was asleep just then. But she was probably out in the back-

vard with all our old friends, maybe watching with my binoculars as . . . I had the cabin lights off, surrounded by the dull red glow of a few necessary dials, the bluer glow of a half dozen small plasma screens, so I could see outside, watch bits of landscape jump into the headlights' wash, low hummocks of waxy ice, pinkish snow the color of the stuff that sometimes grows

down in the bowl of a dirty toilet.

Following old ruts outside, my own tracks, driven over and over again.

The saddleback came up, ground leveling out, forming a very shallow caldera. I pulled over to my familiar place, pink snow mashed flat, glazed yellow from environmental heating, parked where I'd parked a hundred times already, killed the headlights, dimmed the panel lights as much as they'd go

without full powerdown, waited for my eyes to catch up.

The world came out of its own background gloom, like a ghost ship coasting from a fog. landscape tumbling down away from me, dull purplish hills and blue half-mountains, rolling away in the mist like the Adirondacks in springtime, rolling all the way to the shores of the Waxsea. More mist out there, then pale, glassy red nothing disappearing long before it got to where the horizon should've been.

From the heights of the Aerhurst Range, pressure ridge complex puckering the midline of Terra Noursae, maybe seven klicks from where Huygens set down, just a few weeks before I was born, you get one of the best views in

the solar system. Maybe why I stop for it every time.

Overhead, the sky was bright now, though it was near the middle of an eight-day night. Maybe my eyes are learning to adapt quicker, quicker with each passing day. Maybe I'm at home here now.

Sure as hell can't be home anywhere else. Everyone says the sky is orange here, even more orange than the sky on

Venus, but it isn't, Hell, I've been to Venus, I know what that sky looks like, Not at all the same.

Sometimes, I try to imagine what the sky must look like from my old backyard. Sometimes, I imagine it just the way it was when I last saw it, not so many years ago. Other times I get a quick image of all those meters of ejecta that must be . . . well. Those times I let it go.

From overhead, Earth's sky looks dull gray-brown, lit up here and there, day and night, by a tawny red-orange glow. Moonbase newsreels say there's no free oxygen down there anymore, so the glow must be lava. Something

like that.

Far above, hundreds of meters up, a flat snowdrift sailed along, potato chip waxflakes tumbling end over end in slow motion, twinkling, shiny, bouncing off each other, drift keeping its shape the way a terrestrial cloud keeps its shape in the wind. I clutched the Stirlings and brought the rpms as far down as the safeties would let me. Cut the cabin blower and listened to what the hull mikes were hearing.

There.

First, the dry-as-dust creaking of the landscape, stretching gently to and fro under Saturn's tidal strain. Then the dull, faraway moan of the wind, Not like an Earthly wind, wind blowing around the eaves of your house, groaning like a ghost through the branches of dead trees. Deeper here, almost subsonic, a wind that'd never been alive.

Finally . . . like dry, dead leaves, fallen leaves blowing along the gutter on a

cold, gray fall morning, the sound of snow, drifting through the sky.

Saturn was barely visible behind the haze, nearly full, like a huge, featureless vellow moon, striated and edgeless. When it's daytime up here, if you know how to look, you can see the rings from their backscatter, like diamonds in the sky, arcing round the sooty smudge of Saturn's nightside shadow. Not

now. Just that yellow disk, sitting up there, looking like an eyeless face. I was out on Phoebe just once, fixing broken hardware, One-fifty degrees inclination to the ecliptic. Christ. It was a hell of sight, even from thirteen

million klicks out. Maybe, someday . . .

Running late. I powered up the halftrack's systems and got going. With the headlights on, Titan was just a murky moonscape under a vaguely orange indigo sky.

Down by the Waxsea, down where the atmospheric pressure can hit two thousand millibars, the sky is opaque, Sun, Saturn, stars, and pale, iridescent blue Rhea, all lost, It's not really orange, even here. Brown might be a better word.

I pulled out of a gray defile that'd grown narrower since the last time I'd been here, engaging the pillow tires manually to break through a little ridge of waxy snow, methane and ethane not really frozen, but caught up in a sticky mess of organic polymers, pulled around a smoky pool of colorless liquid nitrogen that'd be gone in days.

Ahead of me, on a sloping surface that'd long ago lost its volatile regolith components, Workpoint 31 was looking older than before, the dome habitat baggy in places, bubble airlock drooping a bit. The weather station looked fine though, antennae sticking up just the way I remembered, anemometer turning slowly. I pulled up to the power transformer, extending my electrical probe, docking and parking in one smooth move, cutting the engines, lights, everything that could be cut.

There was a spacesuited figure standing beside a snowmobile with the battery compartment yawning open, motionless, turned toward me. Looking closely, I could see a pale face, barely visible. No radio hail or anything. Fine by me. I got the rest of my suit on, closed myself into the half-track's toosmall airlock, and thumbed the depress valve actuator. There was a soft woof as the air went out through the burner, igniting, flaring away with a brief blue flash that lit up the lock's teacup-sized porthole.

It seemed dark outside as I walked toward the snowmobile, the sky not quite . . . lowering. Haze coming down and . . . a silver golfball seemed to materialize out of the air, drifting down a shallow glidepath, coming between me and the waiting figure. The workpoint's structures were reflected upsidedown in its surface.

Slow, Slow, Almost as if it were decelerating as it approached the ground. Maybe so. The air gets thicker fast down here. It hit the ground and exploded into a brief crater-shape, complete with central peak.

Ploink

There was a quick, rippling mirror on the snow, then nothing.

The radio voice, a soft woman's voice, said, "Starting to rain. We'd better get inside." As we struggled out of our suits, the habitat seemed incredibly cluttered.

People had been bringing junk here and leaving it for years. Just leaving it. I don't know. Maybe, someday, it would've been thrown out. Now? No.

The inner surface of the pressure envelope, arching blue plastic overhead. was lumping here and there, slowly, more raindrops coming down. In just a

little while, if the intensity of the storm increased, it would look like slick blue pudding, gently aboil, The woman, who was dumpy, androgynous in her longiohns, but had a

pretty oval face, dark green eyes, short, straight, straw-colored hair, held out

her hand, "Christie Meitner, I took the hand, feeling the small warmth of her fingers briefly in mine. "Hoxha Maxwell." Funny, there's less than a hundred people on Titan. You'd

think after four years I'd know them all. She said, "Hoe-jah?" Not smiling, just curious. Something nervous about

her, too. Like she was afraid of me or something. I spelled it for her. "Named after some two-bit Albanian dictator by socialist parents who thought Marxism might get back on its feet someday." 2004?

Getting to be a long time ago, these days. I smiled, and said, "Rubbish bin of history, and all that." She looked away for a moment, then gestured toward the habitat's kitchen module, much of it buried under piles of unrecognizable hardware. "I was about to have dinner. You, ah . . . afterward, if the rain's let up, I guess we

could go down to the instrument platform and get started." Rain never lasts long here. I shook my head. "I've been going almost thirty

hours straight. If I don't get some sleep, I'll break everything I touch."

Looking at me, she seemed to swallow, "Don't you, ah, sleep in the 'track?" "Batteries won't charge if the systems don't stay powered down for at least six hours." You know that. What's the problem here?

There was something like despair in her eyes.

Asleep, she breathed with her mouth hanging open, making a hollow

sound that wasn't quite a snore. Slow, soft inhale. Long pause. Quicker exhale, louder, almost like a word.

She'd put me in her bunk, the habitat's only bunk, had then curled up on the floor, snuggled in a spare bunkliner somebody'd left behind, who knows when. The liner on the bunk was her own, permeated with her scent. Nothing perfumy about it nothing feminine. Just a people smell

I felt like my eyes were ready to fall out, but I was too exhausted to sleep, too exhausted to do anything but lie there, looking down at her, lit by dim instrument light. When she'd put out the habitat lights, it'd seemed pitch dark, but after a while, this blue glow, that red one, a little green over them.

Almost like daylight to me now.

Abruptly, I remembered a night when I'd watched Lisa sleeping naked beside me, streaming gold hair splayed out on the sheets, head thrown back to show the long, soft curve of her neck, mulberry-bright eyes closed, moving back and forth beneath paper-thin lids.

Dreaming.

What were you dreaming, back then, back when we were so young? I forgot to ask.

Now I'll never know

Now I'll never kno

Nights like these, I wish I'd never gone to space. But space was the only way an engineering technician could get rich, move us to a lifestyle where we could have that family.

"A million dollars a year." I'd argued, trying to break through her tears, "A

million dollars!"

How long?

It's a twelve year contract, Lisa. Think. Think what it'll be like to have twelve million dollars... And I won't be gone the whole time. I mean, a year on the Moon, a couple of years on Mars maybe. I'll be home from time to time.

on the Moon, a couple of years on Mars mayor. If he nome from time to time. Home to help you buy our new life, set things up. And when it's all over . . . instead, I signed on for four years out by Saturn. Four years of triple pay. And

by the time I got here, somebody, somewhere, already knew what was coming. Hell.

We could've died together, standing out in the backyard, holding hands, watching the end of the world fall on us from a star-spangled midnight sky.

It was still night the next day, of course, Christie reluctantly feeding me a breakfast of weak tea and algae muffins. No jelly, no butter, startling me when she pressed the teabags flat and hung them up to dry.

when she pressed the teabags flat and hung them up to dry.

Of course. When it's gone, there'll be no more tea. I doubt there's butter
and jelly any closer than Mars. I liked Mars, with its red sky and pale blue
clouds. Part of the base where I was stationed. Ondemans 4. with its fine

view of Ius Chasma, was under a clear dome. There was a little garden where some people were trying to grow oregano and poppies. I used to take my breakfast out there, sit and drink my instant coffee, nibble on my Pop Tarts and dream.

How many cups of weak tea can you get from a single teabag?

After breakfast, we suited up and got into the halftrack, squeezing through the airlock one at a time, undocking, then lurching off along the terminal escarpment to where some old eutectic collapse had made a jumbled, sloping path down to the seashore.

sloping path down to the seashore.

Other than answering the few questions I could think of, techie stuff about her equipment problems, Christie was silent, looking away from me, trou-

bled. Christ. Everyone I know is troubled. As we watched the murky landscape, foggy with nitrogen mist at two bar, roll by, I said, "How long you been here?" I've met people who came in with the first expedition nine years ago, mostly scientists like Christie Meitner, who've been out in the field most of that time. Some of 'em are a little boggy in the head.

Not looking at me, she said, "Three months. Before that I was on Delta

Platform.

Delta Platform, on the other side of Titan, where the Waxsea is an endless, landless, featureless expanse of red-tinted silver-gray. "How long on Titant She turned and looked at me with a slightly resentful look. Some people don't want to . . . think about it anymore. "A year. I came in with Oberth's last

run."

Oberth's last run. She was still on her way home from Saturn, halfway between Earth and Mars when it happened, which is why humanity's undertwo-thousand survivors still have an interplanetary vessel. Last time I was back at Alanhold Base, I heard Oberth, damaged when she'd had to aero-brake through an ash-clogged stratosphere, was repaired, was on her way to rescue the Vernus Orbital Station personnel.

Two thousand, Two thousand out of all those billions, Jesus,

But all I feel is that one damned death.

Used to be three fusion shuttles keeping our so-called "space-faring civilization" up and running, running supplies to a few hundred on Mars, a couple of dozen each at Venus, Callisto, Mercury Base, and the Fore Trojans.

The four score and ten out here on Titan. Now there's just the one. Sicilkowskii was caught in LEO, docked to the space station for repair and refit. I can't imagine why the hell people thought she'd be all right, why the station would come through in one piece. Ziolkowskii's crew got real nervous when they saw what was happening. Got their ship undocked and under

way. But.

They were transmitting to Moonbase the whole time, which made for one hell of a newsreel. All the big impacts were on the other side of the Earth from where the ship and station were at the time, but long before they round-

ed the planetary limb, you could see rocks rising into her forward trajectory. Commander Boltano kept transmitting, kept talking calmly, deep, slow voice like nothing unusual was going on, panning his hand-held camera out the command-module's docking window, as the rocks got bigger and bigger, until there was nothing else in sight. His voice cut off with a grunt and the camera view made a sudden, rapid excursion, just before the picture turned

to static.

Goddard, still a few days out, making all those wonderful timelapse videos of the impact sequence, exploded as she tried to aerobrake. I guess by the time Oberth got home a couple of months later, things had settled out a bit. We got to the seashore, running down a long detritus slope, and pulled up

We got to the seashore, running down a long detritus slope, and pulled up to the research platform, which looked a little bit like those old-style unmanned landers, some of them going all the way back to the 1970s, you find

scattered around the surface of Mars.

Beyond it, the flat, empty surface of the Waxsea stretched away like an infinite table, until it was lost in low, dark red mist. Behind us, the delicational folded face of the Terra Noursac terminal escarpment towered like cornflower blue curtains, mostly exposed water ice, the beach we stood on cracked icebits strung through with ropes of peach-colored polymer and black strands of asphalt. Down by the mean datum, Titan's sky really is orange, dull orange even at night, with only invisible Saturn's glory for light, and it seems awfully far away overhead.

Christie was looking at me, face no more than shadowed eyes seen through her suit's visor. "Can we get started? I'd like to get back to work." "Sure."

Funny thing. There were old snowmobile batteries scattered like a perimeter fence around the instrument package, seated in the beach "sand," tilting at angles like so many silent sentinels. As she showed me what was wrong, she kept looking away, looking out at the beach beyond.

I got to work on her problems, easily fixed, mostly shorted out capacitors and the like, carefully packing each ruined component in my toolkit as I replaced it. We used to throw these things away, but...well, maybe somebody can figure out how to fix solid states, one way or another. We sure as hell aren't going to make new ones out here. Not for a long time, even if...

aren't gang to make new ones out neer. Now one a long line, even it ...

Moonbase keeps talking about component fabrication, but it's just pissing in the wind. Watching that newsreel, my buddy Jimmy Thornton, who'd come in on the same flight as me, was scheduled to go home with me, commented there must be plenty of good hardware sitting in collapsed, half-melt-

ed warehouses on Earth. Sure. Maybe we could repurpose a Venus lander and get it back to LEO.

Figure out where to land, get what we needed, get back up.

Later that night, Jimmy cut himself with a utility knife, not leaving a note behind.

Maybe he figured I wouldn't miss him.

Maybe he figured I'd be along shortly.

Christie watched me work for a while, maybe not trusting that I knew what was what. Scientist types are like that. After a while, she wandered off, and, as I worked, I could see her spacesuit drifting about the beach, white against the colored background of Titanscape, out beyond the ring of abandoned hardware sentinels.

Something else we need to rescue. Ruined batteries are easy enough to fix, especially when you've got plenty of chemicals just lying around.

Finished, I buttoned up, turned, and watched her for a bit.

She had her back angled toward me, walking around the perimeter, half

turned away, watching the ground. Every now and again she'd take a quick

step outward, seeming to dance like a child, then stand and watch.

Going nuts already, Dr. Meitner?

Well, maybe so. Most of the scientists have just continued doing their jobs, gathering data, doing interpretations, just like . . . well. Techies keep doing theirs because if they don't, we all die right now.

She was standing with her back fully toward me, hands on hips, looking

out to sea. There was a hazy layer of mist out there, Waxsea a little bit like

out to sea. There was a hazy layer of miss out there, waxses a fine bit has Lake Michigan seen from Chicago's Loop on a cold November morning. I walked toward her in the gloom, wondering which way our shadows would fall, if we'd had shadows. Just beyond her, I thought I saw something,

a bit of yellow smudged on the waxy icecrust. Moving? A ripple caused by a thermocline in the dense air? Hard to tell. It . . . she took a quick step forward, stepping right into the puddle of yellow, which vanished like a mirage. Off to one side, out of her suit-limited peripheral vision perhaps, there was

Off to one side, out of her suit-limited peripheral vision perhaps, there was another smudge, red, tinged with a bit of blue. As I watched, it started rippling slowly, moving in the direction of the hardware platform and parked

half-track siming for a point midway between the two nearest batteries. When I stepped toward it the thing edged away following a long curve

I heard a muffled gaen in my earnhones

Christie rushed past me, hounding toward it in a standard low-see kangaroo hop. The ripple of red was still for a second, then, just as she got to it.

seemed to dissolve into the sand

"What the hell's going on here? What is that stuff?" She turned to face me, skin around her eyes pale behind the suit's faceplate, hands behind her back like a naughty child caught in the act.

I stood still transfixed by the terror in her eyes. Let of people going crazy

these days. No one should be surprised. "Are you all right?"

She nodded inside the suit, eyes going up and down, "Sure, Sure, I... they're "Her eyes darted away from mine scanning the landscane behind me for a second but I was afraid to turn and look "They're a kind of ... a complex waxy polymer construct. They form at the interface between the Waxsea and Terra Noursae, apparently, Just on the beach, though I've found a few beneath the seacrust." She suddenly stopped talking, squeezing her eyes shut hard for a moment, looking away from me when she onened them again.

What makes them move?" "Our waste heat." Pause darting eyes, then "Tye made some cold-soak instrumentation that shows they normally flow along tidal stress cracks in the

beach." Wandering goo, "Why were you . . ." All I could do was gesture. Hiding

them from me? How could I ask that and still seem . . . reasonable?

There was a long nause, filled with my heartheat and the soft group of a distant wind, then she said, "I'm . . . not ready to publish yet,"

I tried to stop myself from speaking, but failed, "Publish? Christie, there aren't any ... I mean ... uh'

Eves blazing, she snapped, "Shut up!"

I felt cold sweat form briefly inside my suit, "Sure, Sorry, I . . . um, Sure," Inside the half-track, all the way back to Workpoint 31, she was silent, as if I'd ceased to exist.

Coming in along the south approach to Alanhold Base, you arrive at Bonestell Cosmodrome about twelve klicks out. This is where the first piloted landing set down, 20 April 2048, though when the second expedition arrived two years later, they tractored the components of the new base some distance

away. Good idea, what with the contamination, the explosion risk, and all. I skirted the edge of the ragged cryofoam disk that kent launches and landings from slowly digging the base's crater deeper and deeper in the ice, not intending to stop, glancing at the activity out of one side window from time

to time. TL-1, the original lander, almost always down for repair these days, was hidden in its hangar, vellow light glowing through the plastic, casting the

gray shadows of workers like puppet-show phantasms. TL-2 was on its meilerwagen being towed to our only launch gantry. None of it's necessary, of course. When these things break down, we can use the little ships the way they were designed to be used, wingless lifting

bodies setting down feather-light on stubby landing legs, lifting off again in a bowl of blue fire. Great idea, indigenous propellant nuclear thermal rockets. Wonder how

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long they'll last? No longer than our last shipment of radionuclides. Then what? No answer.

Briefly, I thought of the talk Jimmy and I'd had about converting TL-1 to run off one of the base's fusion cores. Could be done, I guess. TL-1 won't last much longer anyway.

I'd ridden the landers three times in three years. Getting here in the first

place. Going out to service hardware on Phoebe. Making emergency repairs at Ringplane Station.

Christ, that was beautiful. Like being a fly on a wall thirty thousand kilo-

meters high, looking straight down to yellow Saturn's hazy cloudtops, feeling giddy at the thought of somehow falling. Guess I expected one last flight, climbing up out of Titan's orange soup

clouds into a sky true blue indigo, then black and spangled with stars, docking with Oberth, then going on home.

Back at Alanhold I narked my halftrack in the base's unpressurized

Back at Alanhold, I parked my halftrack in the base's unpressurized garage, corrugated arch sort of like a Quonset hut open on both ends, docked to a charging mast, and got out. I always take a quick look up when I roll out through the airlock door, because you can see the last bits of your depress fire boiling around under the eiting, like a misty, glowing blue cloud.

Out one end of the garage, I could see somebody'd strung a brand new UN flag on the base's pole, woven plastic fabric rolling gently in the breeze. Every now and again, it'd stretch out a bit so you could see the white lines of the map. Maybe they should reconsider the flag? Sconer or later, we'll run out of them.

Maybe they should reconsider the Hag? Sooner or later, well run out of them. There was a sparse snow falling, big, shiny white flakes like Ruffles potato chips, tumbling, shrinking visibly as they fell straight down. I don't think any of them reached the ground intact. We put a lot of waste heat into this environment, whether we like it or not.

I turned away, remembering a picnic I'd had with my parents, Just some city park, summer, blue sky with a few wisps of pale white cloud, kids running around, screaming and yelling. Us on a blanket. Ruffles potato chips. Sealtest French Onion dip with so much MSG it made me sleepy afterward. A&W root beer.

Dad was killed in an autohighway pileup back in the twenties. Made the national news, he and thirty or so other poor bastards ground up in the wreckage, media exposure forcing Congress to cancel the project.

Mom . . . I don't know. She and Lisa never really got along, so . . .

I went in through the base airlock.

After changing in my cubbyhole, not even enough room to stand fully upright, I went to the cafeteria, passing silent people in the hallways, stepping to my right, turning to face inward each time, men's and women's faces passing centimeters from mine, always with eyes downcast. Nobody in here, tables empty, dusty, chairs jumbled every which way, no one bothering to push them in any more.

I went to the freezer and got a couple of tacos, bemusedly wondering what

life would be like when they ran out, now that Taco Hell is no more, picked out a pouch of cherry Hi-C while they were nuking, took my mess and went next door to the day room. More people here, TV on, playing a disk of the latest newsreel.

est newsr

The screen was showing a gently curved planetary limb, layer of bluish haze hanging in an arc over featureless gray ash clouds. As I watched, light

played in the clouds, first one dull spark, then others, propagating around it,

then nothing. Lightning.

I sat down next to Ron Smithfield, slouched in a chair with his legs splayed out on the floor's worn green carpet-tile. Green like grass, Green, the psych manuals said, so we'd feel comforted, when we were far, far from home,

He said, "You missed Durrell, Have to wait for the replay,"

On the screen, the limb view was gone, nothing now but the gray clouds, growing steadily closer. There was a line of text, yellow-green letters, deceleration values crawling across the bottom of the image, "What'd the bastard have to say for himself this time?"

Rodrigo Durrell had been Secretary of Space in the second Jolson administration. He and the Undersecretary for Outer System Exploration, a Ms. Rhinehart, had managed an "inspection tour" of Moonbase, complete with their families, just before the asteroid intercept mission was launched.

Ms. Rhinehart, I understood, had a five-year-old daughter, Wonder what

it feels like to be the only five-year-old girl in the universe?

Wonder if President Jolson knew? Did she stay on the job out of bravery or ignorance? Did she and her teenaged children huddle together in the White House, or in that old shelter in Virginia, waiting for it to happen? For a while, Moonbase kept trying to raise the National Command Post in Colorado. Nothing, Maybe Chevenne Mountain took an impact.

Ron sighed, "Mercury Base personnel are dead,"

The image on the screen was starting to grow dark now as the ash clouds got close. You could see a bit of pink where the plasma bowshock was starting to form around the probe's aeroshell. "I thought they had another few weeks of air left."

He nodded, "Apparently, once they understood Oberth couldn't come get

them for another five months, they took a vote. Had the base doctor give them shots of surgical anesthetic. He radioed in their decision, then injected himself." "Mmh." Nothing you can say about something like that. The image on the

screen broke up into jags of colored static, quickly replaced by a colorbar pat-

"Durrell says they're going to bring us all home in order, Venus, then the Trojan habitats, then Callisto. Then Mars, then us.

Home, I imagined myself on the dead Moon, sitting out the rest of my life looking up at dead Earth. "I guess we're last in case Oberth breaks down.

Ron nodded. There was a man on the screen now, some scientist type, talking, but I got up and left the room, not wanting to hear his excuses. Last time, he said it might take a year before a manned landing would be feasible, get a crew down there so we could see what the hell we've got left to work with.

That figure, I imagine, will be revised upward. Then revised upward again. Nothing to do but go to the showers, then get myself to bed, get a good night's sleep so I could resume work in the morning. I took a towel and shampoo lozenge from the dispenser, got out of my coveralls and hung them on a peg, got under a nozzle in the far corner of the room, hot water sluicing over the back of my neck, cascading over my shoulders, running down my spine

like warm, wet hands, making me shiver. One thing we'll never run out of, here on Titan: hot water. Plenty of ice.

Plenty of fuel for the fusion reactors. A shadowy figure came in, carrying its own towel and lozenge, got out of its coverall and hung it on the hook next to mine, came walking across the room toward me. "Hoxha," she said. Standing still, looking up at me with her big, dark eyes.

Maybe waiting for me to make room for her under my nozzle?

I stood flatfooted, looking down at her, taking in a thousand naked-woman details, "Hello, Jennah."

She looked up for another few seconds, then her eyes fell. She turned on the nozzle next to mine, cloud of steam rising, making the mist even denser. The floor seemed sticky under my feet, whoever had tub-and-tile duty shirk-

ing the job. I turned to watch her, slim, pretty woman with long, curly black hair turning slowly around under a fine needle spray, maybe showing off for me, maybe not, water streaming over her shoulders, jetting provocatively from her nipples, running down her belly, spattering between her legs.

After a while, she looked up at me again, stretching her arms over her head, arching her back, flashing the red dot of a steropoeic implant. "You

used to be interested. Hoxha."

Sure. Used to interest me a lot. Lisa and I talked about this, agreed that four years was just too long, that we'd tell all when it was over and done with, tell all and forgive whatever there was to forgive.

I shrugged, "Sorry,"

She looked at me for another few seconds, then nodded, looking away,

turned off her shower and walked away. I stood in the mist for a little while longer, thinking about the failure of my interest in . . . well. Went to my room and went to sleep. Didn't want to

dream, but I dreamed anyway. In the morning, tired after a night's sleep fractured by fragmentary images of things that didn't exist anymore, I stopped by Tony Gualteri's cubby on the

way down to the halftrack hangar. Tony was a geochemist who'd been on TL-1 the day it set down on Titan, had been out here ever since, slowly turning into the small, wiry old bald guy I'd first met almost four years ago. When I told him about the colored wax things I'd seen floating along the

beach surface out by Workpoint 31, he looked puzzled and scratched a chin made black by dense beard stubble.

All sorts of crazy things on Titan, he said. Anything's possible.

I stood expectantly, waiting, Well?

He'd shrugged. It's her project. None of my business. Then he turned back to the screen of his little computer, doing whatever it is geochemists do with their data.

Do, even when . .

My own day's work was up the coast, so I had a fine drive along the terminal escarpment, going to where one of the remote automated resource stations had inexplicably gone silent. Probably no surprise waiting for me there.

Things fall apart. I'm here to fix them.

By the time I got there, the weather was lifting and the Sun was starting to rise, long streamers of golden light fingering through the orange-brown

sky, diffuse smudge of red-gold smearing up through the mist hiding the Waxsea horizon. It'd stay that way for a long time, Sun taking hours to clear the mist and disappear in the sky, becoming no more than a diffuse bright region, turning its part of the sky to shades of orange peel, layered like mother-of-pearl.

Down in the Dark

The station was on the rim of the escarpment, weather instruments spinning and nodding away, like nothing was wrong, sensors on cables hanging down the cliffside all the way to the heach, far below. I stood looking over the edge for a few minutes, imagining I could see strange colors shining in the sand, but . . . right, Imagination, Too far to see anything, Anything at all.

Problem turned out to be simple but aggravating. Something had shorted out a sensor head hanging off the end of one of the cables, sending a power spike back up the line that made the data recorder shut itself down as a safety measure. Then it couldn't come back up, because something was still

wrong down at the sensor.

Easy enough to reset the computer, but it took me four hours to reel in the cable. Somehow, some kind of black, tarry stuff had gotten inside the instrument, gotten into electronics, and then acted as a very nice conductor, the exact definition of a short circuit. Took about a second to clean it out. saving a bit of sample in a bottle for whoever might be interested, and that was that

Back inside the halftrack, I sat in the driver's seat, looking out over the wide, silver-red expanse of the Waxsea, toward the dark mist of the horizon, smelling the faint odors of Titan that'd made it through the lock-purge event,

accompanying me inside.

They aren't bad smells. Not bad smells at all. Certainly not the organic rot odors some old writers had imagined, imagination hardly colored by rational thought. Just a faint, crisp smell like white campstove gas, uncontaminated by oxygenation compounds. I remember my grandfather talking about the pleasant smell of the gas pump, back when he was a boy, back before they loaded the fuels with ether and alcohol. That and an occasional whiff of creosote. Titan smelling like an old-fashioned telephone pole, weeping black tar

in the hot summer sun Thinking about black tar, feeling heavy lidded, the Titanscape seemed to expand in my eyes, filling them up, driving away the insides of the halftrack, Like I was outside. Like I could walk around outside, feel the wind in my

hair, icy silver golfball raindrops ploinking on my skin, the flutter of waxy snowflakes like butterflies in my face.

What the hell was it about that stuff in the sensor head?

I really haven't learned enough about Titan despite my years here. Too busy being Mr. Fixit. Scientists not caring what I knew or didn't know.

Jennah. Jennah tried to talk to me sometimes, times when we were finished with what we had in common, lying cramped together in her bunk or mine. Tried to talk to me about her specialty, some branch of meteorology,

studies on the high-pressure atmospheres of gas giants.

Can't get there from here, she'd said. No trips to Jupiter, to Saturn. Not in my lifetime. Maybe, someday, a bit of work high in the skies of Uranus or Neptune? Maybe in a generation? Too damned late for me, she'd said. Titan. Titan is all there'll ever be for me.

Prophetic words?

In all innocence, I guess.

And, talking, she made it sound like nothing more than numbers, reducing a beauty that had the power to mist my eyes into something like math home-

work. Cubus plus sext rebus aequalis vigentum. Once, staggering under the workload of a powered exoskeleton, I'd looked

off the top of Ishtar's Veil, high in the Maxwell Montes of Venus, and seen a

William Rarton

colored glory, swirling with the ripples of a Kirlian aura, stood transfixed by it. No numbers there. No numbers at all.

I'd shut Jennah up with renewed kisses, overwhelming her with the demands of innumerate flesh. After a while, she gave up telling me about the

arithmetic of her dreams. In time, I fell asleep, hoping to dream about Jennah, at least. Dream about

the things we'd done together, the simple fun we'd had in those little rooms. Maybe, if I dreamed that dream, I'd awaken in the night to find myself flooded with renewed desire. Maybe in the morning. I'd turn this thing around and drive on back to base. Drive back, look Jennah up and . . . what the hell

would they do if I took some extra time off? Fire me? Instead, sleeping, I dreamed about Christie Meitner, dumpy in her longjohns, barely human in her pressure suit. Christie Meitner and her fields of color. Christie Meitner hopping like a maniac, hopping on puddles of melt-

ed cravon stuff, driving the colors away. I woke up in the morning, looked for a bit at my refrigerated sample, and then set sail for Workpoint 31, calling base to let them know I was sidetracked, that I'd call them again later with a revised schedule.

It's not far out of the way, I thought. A few hours, that's all,

She wasn't at the habitat, blue dome looking baggier than ever, rather seedy by daylight, and didn't respond to my radio hail. Well, Snowmobile's gone, at any rate. Since there was plenty of juice in the batteries, I turned and drove on, following the tracks down to the edge of the escarpment, heading for the rubble fall and her instrumentation site.

For some reason, I stopped a few hundred meters shy of the turn and got out, listening to the soft woof of the vent burner, wondering if she'd see the

cloud of blue flame as it dissipated, rising above the cliff's edge.

I walked down that way, waxy surface crackling under my boots, steam rising around me once I got off the beaten track and started disturbing virgin regolith, finally stopping right on the verge, looking out into open space. The beach, silver sugar crystals woven with orange and black thread. The silverred sea. The red-orange-brown haze farther on. The sky, orange and brown with red clouds and dark, faraway snow, descending blue bands of rain like

shadows in the mist. A soft voice inside whispered, Alien world. Truly alien. Moon, Venus, Mars, all just dead rock, whether under black sky, vellow, or pink. This place, though . . . I shivered slightly, though it was hot in my suit, sweat trickling down my ribs, under my arms, trickling down 'til absorbent undergarments

wicked it up, fed it to the suit systems, turning it back into drinking water. Below, stark and alien in the middle of the beach, Christie's instrument cluster was unnaturally motionless, powered down, I realized. Christie herself was a tiny, spacesuited white doll figure perched precariously atop the

weather station access platform. Batteries. The dead batteries were gone too. Ah. Over there, piled at the foot of the eutectic fall, where she'd also parked the snowmobile. Maybe she

was planning on hauling them back to camp for someone to take away. Good idea. Nice of her to . . .

Beyond her on the beach, right down by the edge of the sea, was a writhing spill of color. Blue. Green. Red. A broad stripe of olive drab, like a foundation between the others, making it almost look like . . . well, no. Only to me. Christie's down by the beach. What was she seeing?

The colors were moving slowly, like swirls of oil in a lavalite.

I released my suit's whip antenna and turned up the transmitter gain, intending . . . the colors suddenly started to jitter and Christie seemed to crouch, as if coiled by tension. Like she was . . . expecting something? Jesus. Imagination run riot.

I said, "Christie?" There was a background hum in my earphones, feedback from the halftrack communication system.

The colors jumped like water splashing away from a thrown rock, but Christie didn't look up, seemed wholly focused on what she was seeing. "Christie? Can you hear me?" Could she possibly have her suit radio

turned off? Stupid. Fatally stupid in this place. And the colors? They broke up into jags and zigzags as I spoke.

Waste heat. Radio waves are a form of heat. Just another sort of electromagnetic radiation, pumping energy into the environment.

Christie stood up straight, looking at her chaotic colors, putting one hand to her helmet, as if trying to scratch her head. She looked down, bending slightly at the waist so she could check to see her suit controls. What? Checking to make sure everything that could be turned off was?

Christie!" The colors pulverized into hundreds of tiny globules, which

started winking out rapidly, one by one, then in groups.

Christie suddenly stiffened and spun in place, looking up, first at the clathrate collapse, then scanning along the top of the cliff. I was just a speck up here, but starkly alien against the sky, and she saw me in seconds.

Long moment of motionlessness, a quick glance back to where the colors had been, as if reassuring herself they were gone, then she waved to me. It took a minute or so before she remembered to turn on the radio.

By the time I'd gotten the halftrack down to the bottom of the fall, wondering whether I ought to inject any words into the silence, failing to make any decision. Christie'd turned the instrument station back on, its weather station spinning and nodding, my comm system picking up its signal, data relayed to Workpoint 31, then on back through the microwave link to Alanhold.

How much energy is there in a microwave beam?

Plenty, I guess. Human science is playing merry hell with the Titanian . . . oh, hell. Ecosystem's not the right word, is it? Not in this dead place. Well. Our science wasn't making nearly the mess here Mother Nature'd made of Earth.

When we're gone, Titan will get over it.

Interesting to imagine a solar system empty but for our pitiful few ruins. I helped her load all the dead batteries into the halftrack's unpressurized cargo bin, then followed her home in the snowmobile's wake, watching its

misty rooster tail gradually grow smaller as she drew ahead.

By the time I got into the habitat, she was already stripped to her longiohns, bending over the open refrigerator door, rooting around among a meager pile of microwave delights. Holding the red plastic sack of a Quaker meatball sub in one hand, she half turned, face curiously blank, and said,

"You want anything? I got, uh . . ." She twisted, looking back into the fridge. All sorts of goodies.

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God damn it. I said, "Christie, we need to talk about what you just did. I mean, turning

off your radio ...? She turned her back to me, putting the sub away, slowly closing the refrigerator door, slowly straightening up, facing the wall. Finally, a whisper, "What did you see, Hoxha? How long were you . . ."

How odd. What did I see? While I was thinking, she turned and looked at me, startling me with the depth of fear in her eyes. What the hell could I possibly have seen, that I... "I'm not sure. You were watching... colors on the beach, over by the sea shore."

A bit of relief

"You know, it's funny," I said, watching carefully. "Those colors almost looked like they were . . . I don't know. Making a picture. Swirls. Like abstract art."

The fear spiked.

She said, "Did you...mention what happened last time to...anyone?"
I told her about Gualteri, watching her swallow before she spoke again.
"What did he save?"

"What did he say?"
I shrugged. "Said it was none of his business. Said you'd let us know when

you were ready to . . . puh—publish." Publish! Jesus. Audible sigh, eyes rolling back a bit. Then she looked up at me, stepping closer, and said, "That's right, Hoxha. My business. Um. I'd like you to

promise me you won't . . ."
"Christie, I want to know why you turned the radio off. Now." People willing to violate safety regs for their own purposes could kill us all. And you

know that, Dr. Christine Meitner, Ph.D.

The look in her eyes became almost desperate, "Hoxha, I'll give you any-

The look in her eyes became aimost des

thing you want to keep your mouth shut."

Laughter made me stutter again. "You're offering me a bribe? What the hell did you have in mind, your Swiss bank account?" Scientist like this

would get a pretty penny for a trip out here. A lot more than some miserable little engineering tech. "You think there's anything left of the fucking Alps?"

That made her flinch for just a second, not quite getting through. Me. I

That made her flinch for just a second, not quite getting through. Me, I suddenly saw Geneva in flames as the sky burned blue-white with tektite rain.

She looked away, breathing with her mouth open, swaying slightly. When she turned back, I was shocked to see tears in her eyes. She said, "Christ,

Hoxha. Please. I'll give you anything you want! Just name it!"

Then she took the zipper ring of her longjohns and pulled it open, open all the way down the front, showing me big, flabby breasts, roll of soft fat around her belly, ratty tuft of reddish-brown pubic hair peeking through the yee at the bottom.

Standing there then, looking at me, eyes pleading.

And I felt my breath catch in my throat, caught by a bolt of unfamiliar feeling.

I put up my hand, palm toward her and, very softly, said, "Christie. Just tell me what's going on, okay?"

She looked down then, face clouded over. Slowly zipped up her longjohns, and I almost didn't catch what she said next.

It was, "I think the melted-crayon things are alive."

I held my laughter, looking at her, mouth hanging open.

It's all a lifetime ago, for all of us.

It's all a litetime ago, for all of us.

I remember when I was a little boy, seven years old, I guess, sitting with
my grandfather, who must have been in his early sixties then, watching re-

ports from the Discovery lander, setting down on Europa, releasing its probe,

drilling down and down through pale red ice, down to a sunless sea.

Remember my grandfather telling me how, when he was seven, it'd been

Kemember my grandfather telling me how, when he was seven, it'd been Sputnik on the TV, dirigible star terrifying on the edge that atom-menaced night, his grandfather a man born when the Wright Brothers flew, man who remembered being a little boy when Bleriot made his fabulous channel crossing.

ing.

There was no life under the icy crust of Europa, just a slushy sea of organics, scalding bubbles of water around lifeless black smokers. My grandfather died a few months before the first men got to Mars and proved there was no life there either, probably never had been, just as his grandfather died not long before Acollo touched down on the Moon.

I figured I'd probably die just before men got to the nearest star, living on in some little boy's memory.

Shows how wrong you can be

And now here I stood on Titan's lifeless chemical wonderland, facing a woman who'd gone mad, suffocating in a delirium of loss and denial.

Christie didn't argue with me, anger growing in her eyes, displacing the fear, masking her with the familiar scientist ego I'd seen on so many self-important faces, so often before. Sometimes they say, "Well, you're just a tech," and turn away. More often than not, I guess.

Christic led me outside to the halftrack and made me drive her back down to the beach. We parked the vehicle well clear of the instrument station and she told me to stand on top of the cargo bin. "You stay here and watch. Otherwise we'll make too much waste heat and ..."

On the run then, no more words for me.

Over by the instrument station, she took a pair of utility tongs and fiddled with something I could see sticking out of the beach regolith. Squint yes. The top of a small dewar bottle. When she uncorked it, a hazy mist jetted, like smoke from a genie's bottle, rolling briefly, beachscape beyond made oily

looking by the vapor.
"What's that stuff?"

What suits statist Statistics She was panting on the radio link, out of breath, voice loud in my ears as she pulled the bottle from the ice. "Distilled from beach infiltrates. It's . . . what they eat."

She had it clear now and was scurrying toward the rimy area where cracked-ice beach became Waxsea surface.

"What're you . . ."

"Shut up. Watch."

She suddenly dumped the bottle, just a splash of clear liquid that quickly curdled and grew dark, billow of greasy fog momentarily disfiguring the air, then scuttled back toward me, dropping off the tongs and empty bottle as she passed by the station.

And it didn't take long for the colors to bloom.

Before she got to my side, blobs of red and yellow, pink, green, blue, were surfacing by the edge of the beach. Surfacing and then sliding inward, making the beginnings of a ragged vortex around the chemical spill. Around and down, dropping under the surface, not quite disappearing, surfacing again.

The smoking puddle of goo started to shrink

And Christie, standing beside me now, said, "You see? You see?" I said, "I don't know what I'm seeing. I . . ." I jumped down off the half-track, bounding slowly in the low-gee, heading across the beach.

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Christie said, "Stop! Stop it, you'll . . ."

I stopped well short of the slowly writhing conflagration of colors, marveling at how they staved distinct from one another. You'd think when the blue one touches the vellow, there'd be a bit of green along the interface. Nothing, Not even a line. Not even an illusion of green, made by my Earthgrown eyes. They looked sort of like cartoon amoebas, amoebas as a child imagines

them before he's looked through a microscope for the first time and realized "pseudopod" means exactly what it says.

And it really did look like they were eating the goo.

Suddenly, the blue blob nearest where I stood became motionless, Grew a brief speckle of orange dots that seemed to lift above its surface for just a moment, then it was gone, vanished into the beach ice. All in the twinkling of an eye, too quick for me to know exactly what I'd

seen.

The others followed it into nothingness within a second or so, leaving the smoking goo behind, an evaporating puddle less than half its original size.

I think I stood staring, empty-headed, for about thirty seconds, before trying to imagine ways you could account for this without invoking the magic word life. "Christie?"

Nothing, But I could hear her rasping breath, made immediate by the radio link, though she could have been kilometers away. "Christie . . ." I turned

She was standing right behind me, less than two meters away, eves enor-

mous through the murky faceplate of her spacesuit. She was holding my ice axe, taken from its mount on the outside of the halftrack, clutched in both hands, diagonal across her chest.

I stood as still as I could, looking into her eyes, trying to fathom . . . Final-

ly, I swallowed, and said, "How long have you been standing there?"

Long enough," she said. Then she let the axe fall, holding it in one hand. head raising a few icechips from the beach, "Long enough, but . . . I couldn't do it."

She turned and started to walk away, back toward the halftrack.

The ride back to the habitat was eerie, full of that shocky feeling you get right after a serious injury, when the world seems remote and impossible. I couldn't imagine what would've happened if she'd tried to hit me with the axe. Like something out of one of those damned stupid old movies.

The one about the first expedition to Mars, movie made almost a hundred years ago. The one where the repair crew is out on the hull when the "meteor storm" comes. There's a bullet-like flicker. The inside of this guy's helmet lights up, showing a stunned face, twisting in agony, then the light goes out and he's dead, faceplate fogged over black.

Just like that

Our suit pressure's kept just a few millibars over Titan ambient by helium

ballast. Maybe if she cut my suit, there'd be a spark and . . . I pictured myself running for the halftrack, spouting twists of slow blue flame.

She said, "I guess . . .

Nothing, Outside, the sky was dull brown and streaked with gold, as welllit as Titan's sky ever gets. Somewhere up there, Saturn's crescent was growing smaller, deepening shadow cast over her rings. You could tell where the sun was, a small, sparkly patch in the sky, like a bit of pyrite fog.

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I said, "I keep trying to think of ways it could just be some fancy chemical reaction. I mean, organic chemistry . . .

She snickered, making my skin crawl.

Back in the habitat, out of our suits, sitting at the table in our baggy underwear, we ate Caravan Humpburgers so old the meat tasted like filter paper, the buns stiff and plasticky, and mushy french fries that must've been thawed and refrozen at least once in their history.

Too much silence. Christie sat reading the ads on the back of a Humpburger package. Something about a contest where if you saved your wrappers and got four matching Humny the Camels, you could win a "science vacation" to

Moonhace

I pulled the thing out from under her fingers and looked at the fine print. The trip date had been seven weeks before the impact. Christ. I said, "Maybe whoever won this is still alive."

Or maybe, knowing what was about to happen, they just sent him home to die.

Christie was staring at me, eyes big and unreadable. "You going to tell me about the cravon things now?"

Silence, then she slowly shook her head.

I found myself thinking about the way she'd looked a couple of hours ago,

offering her virtue to me like . . . hell. Like a character in one of those silly romance vids Lisa was always watching when we . . . nothing in my head now but Christie with her suit liner zipped open, titties hanging out, eyes begging me to ...

I felt my face relax in a brief smile.

Her eyes narrowed, "Who you going to tell?"

"Nobody, I guess I was . . . reconsidering your offer." My own snicker sounded nervous. Christie's face darkened and her eyes fell, clouding over with anger. Then

she said, "I . . . I'm not steropoeic," Not . . . I suddenly realized the magnitude of her bribe, what it might've

cost her to make the offer. And then I was picturing us together, crammed into the little bunk, maybe

sprawled on the habitat floor, having cleared away junk to make a big enough space.

Felt my breathing grow ever so slightly shallow?

Really?

No way to tell.

I said, "Sorry. I was just trying to . . . lighten things up. You know. I mean . . . when I saw you with that axe . . .

She nodded slowly. "Are you really not going to tell?"

I shrugged, "What difference does it make?"

Eves booded. Keeping something to herself.

"You going to tell me?"

Long, shadowy look. Making up her mind about what kind of lie she might want to tell. The silence drew out, then there was that same little headshake. I said, "Okay," then turned away and started getting into my suit, while

she sat and watched. Every time I looked, there was something in her face, like she wanted to spill whatever it was.

Every time she saw me look, her face would shut like a door. Once my suit was on and pressurized, I went out through the lock and was

on my way. William Barton 28

I tried thinking about it rationally, all the long drive back, but I couldn't. All that kept coming into my head was, What difference can it make now? and, Why does she care?

Care enough to pick up an axe and consider splitting a doomed man's head.

There are fewer than two thousand people left alive in the entire universe. We are all going to die, sooner or later, when the tech starts to fail, when our numbers fall, the spare parts run out . . . when we all go mad and run screaming, bare-ass naked, for the airlocks.

I pictured myself depressing the halftrack, rolling out the lock door, rising to my feet in godawful cold, taking a deep breath of ghastly air and . . . hell,

Can't even imagine what it might be like,

Like sitting in the electric chair, heart in your throat, senses magically alert, waiting for the click of the switch, the brief hum of the wires and . . .

and then what? We don't know.

Funny. Just a day ago, just yesterday, I thought I knew. Thought I wouldn't mind when the time came that I . . . veah, Like Jimmy Thornton and his utility knife. Just like that. I thought about getting myself a big bowl of nice warm water, sitting down

on my bunk, all alone with the bowl between my legs, putting my hands and the knife under water, making those nice, painless cuts, watching the red

clouds form.

Probably be a little bit like falling asleep, hm?

Jimmy looked asleep when they found him. Didn't even spill the water when he went under.

I crested the last hill before the base, Bonestell Cosmodrome coming over the horizon, and parked the halftrack on a broad, flat ledge at the head of the

approach defile, wondering why the hell my skin had begun to crawl. TL-2 was on the launch pad now, tipped upright, fully fueled, her meiler-

wagen towed away. On Earth, a rocket like this is always surrounded by a falling mist of condensation. Here, where heating elements are used to keep the fuel from gelling, there's a narrow, rippling plume, mostly thermal distortion, going straight up.

Today, it only went up a few hundred meters, then was chopped off by

wind shear. As I watched, the engines lit, bubble of blue glow swelling between the

landing jacks, TL-2's dark cone shape lifting slowly. There was a sudden, snarled blossom of red-orange fire spilling across the plastic as superheated hydrogen started combining with atmospheric components, nitrogen, miscel-

laneous organics, HCN a major combustion byproduct,

The flame was a long, beautiful tongue of blue-white-yellow-red, swirling like a whirlwind as it climbed against the orange-brown sky, passing through first one layer of diaphanous blue cloud, then another, then disappearing, becoming diffuse light, then nothing,

She was on her way to Enceladus, I knew, where we'd found a few million liters of helium trapped in an old ice-9 cell, the precious gas one of the few

things we couldn't make or mine on Titan.

As I put the halftrack in gear, heading on home, I thought about what it would be like to try to live for the rest of my life on the Moon, Earth's moon, the only real Moon, dead old Earth hanging like an ember in the sky.

Maybe we're making a mistake.

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Maybe they should all come here.

Driving under a featureless brown sky, surrounded by a blue-misty landscape of red-orange-gold. I tried thinking about Christie's little beasties again, but failed.

I wound up hiding in my room, staring at the bulkhead for a while, then turning on the miniterm, watching with alarm as the screen sparkled, choking with colored static for a moment before the menu system came up.

What will happen when the electronics go?

Will we all die then? Or try lashing up homemade replacements, try flying without guidance, try . . . there was a space program before there were real computers. Men on the Moon, that sort of thing. That technology might have gotten us out here. Maybe not.

Nothing in the base library I hadn't seen a hundred times already, other than those last dozen episodes of Quel Horreur, the French-language sitcom that'd been all the rage right before the end. JPL wasted one of its last uplinks on that and . . . well, they knew. They must've known. What were they thinking?

Can't imagine.

I'd watched about thirty seconds of the first one, happy laugh-track, pale blue skies, white clouds, green trees, River Seine and Tour Eiffel.

Stayed in my room so I wouldn't have to deal with Jennah, who kept on looking at me as I stopped by the mess to pick up my dinner. Went to my room and then couldn't stop thinking about her, about the last time we'd . . . which led to thinking about Christie with her longiohns hanging open, offering herself up to a fate worse than death, then on to Lisa, sprawled in our

marriage bed. They say you can't really remember pain, remembering only the fact of it.

not the precise way it felt. Maybe the same thing's true of happiness. I hung like a ghost beneath the ceiling of a room that no longer existed,

looking down on a naked woman whose touch, taste, feel, laughter I was already losing, grappling with the loss, struggling to reclaim the few bits and pieces I had left. Sometimes I wonder why I ever left Earth. Maybe we could've been happy

without the money. Maybe. Regret, they say, is the most expensive thing in the world, but it's a lie, Regret is free; you get to have as much regret as you want. And then, when

you're done wanting regret, you find it's yours to keep forever.

At some point while I was staring at the base library menu system, the remembered image of Lisa turned to the much fresher image of Jennah. damp and eager in my arms, then, somehow, to Christie, huge eyes beseeching.

The next day, I went on out to Workpoint 17, a drilling platform on the backside of Aerhurst ridge from Alanhold, sitting at the top of a long slope, giving a vista like nothing on Earth, or any other place I'd been, long, flat, fading into the mist dozens of kilometers away, like the greatest ski run vou could ever imagine.

When I first got here, the sight of these vistas, wonderful and strange, made me think about all the places I'd been already, made me think about the red canyons of Mars, the rugged orange mountains of Venus, the soft black lava plains of the Moon.

Made me remember my first sight of Earth from space, stark, incredible, white-frosted blue seen from the other side of the sky.

I remembered standing atop the terminal scarp of Terra Noursae, looking out over the Waxsea's unimaginable wasteland, and wondering if I shouldn't tell Lisa I was never coming home, that I'd keep on giving her the money, all the money, but she'd have to find another man to help her spend it, another

man with whom to have those children we'd discussed. Christ, they were talking about the moons of Uranus back then! And me, I started thinking about what it'd be like to stand on a cliff ten kilometers high. Started thinking about the geysers of Triton, dim blue Neptune hang-

ing in the black sky overhead. . . .

It still had the power to make my insides cramp with desire. Workpoint 17 was manned by two Russian women who'd been brought out from the Fore Trojans about two years back, a pair of stocky, blunt-faced, red-headed petroleum geologists from Kazakhstan, looking like twin sisters, maybe in their forties, maybe a lot older, who'd been knocking around the solar system for something like fifteen years.

They'd always been cut-ups, kind of fun to be around, always ribbing each other, ribald stuff half in English, half not, kidding about who was going to have me first and who'd have to take sloppy seconds, though I always figured

them for lesbians. It was inside their habitat, with its stark, vinegary smell, watching one of them getting out of her suit, broad rump poking up, seam of her longiohns starting to pull apart where the stitching would soon give way, that I made

some vulgar remark or another. Irena, I think it was, looked at Larisa, owl-eved with surprise, then back

at me, making a wan smile.

"Uh. Sorry." Irena stood up, facing me now, spacesuit still cluttered around her ankles, and, very gently I thought, said, "Don't be. We've been worried about you."

Later, I sat in one of my parking places, high atop Aerhurst, on a crag of pure white ice projecting from where the beaten track crosses the low shoulder of a slumping, rounded peak, lights out, engines off, all but powered

down, staring out the window.

In the distance, over the lowlands, was a torrential rainstorm, vast, flat, blue-gray cloud hanging under a darkened sky. The rainfall beneath it was like a pointillist fog, freckled with dots too little to see, somehow there nonetheless, an edgeless pillar of silver-blue blotting out the landscape beyond.

Atmospheric cooling.

Somewhere above the clouds, I knew Saturn was all but gone, turned to black, blotting out the sun. I looked up, trying to make out the shadow's edges, make out the ringplane backscatter, but the turbulence was too great today.

Maybe some other time.

Just what I'd thought of saving to Irena and Larisa, anticipating an offer that never came. Still, it was nice to think of them worrying about me. As though I still mattered to anyone at all.

The comm light on the dashboard began to wink, an eye-catching sequence of red-blue-amber-green, one color following the other at quartersecond intervals, colors merging into a brief, bright sparkle, I reached out

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and touched a button with the tip of my finger, spoke my call sign, and listened.

Christie's voice came out of a rustle of static: "Can you schedule me for a maintenance visit?"

Something about that voice, odd, nervous, reluctant, eager. Or maybe it was just my imagination. How much can you read into a voice turned to whispers by radio interference?

"What's wrone?"

Long pause.

"I'm not sure. Maybe the same as before, only worse."

Nothing much had been wrong before. A few toasted chips; nothing serious, nothing that couldn't have waited if I hadn't been... I scrolled my schedule, thinking about Christie, about her colored waxworks beasties, about...

I said, "I'm on a routine maintenance run through the automated geophone chain this side of the ridgeline. I can divert to your workpoint between numbers three and four."

bers three and four "When?"

Urgency?

Nothing's urgent anymore.

I said, "Thirty-one hours."

Much longer pause. "Oh."

The disappointment was stark, bursting right through the static.

She said, "I guess that'll be okay."

"See you then."

"See you then."
I punched the button and sat back to watch the rainstorm build as the sky

grew slowly darker above it, taking on the rich colors of mud. What can have happened? What can she be wanting? Something to do with the melted-crayon things? Certainly not anything to do with me. My thoughts strayed again to her zipped-open longjohns, making me smile at myself. I'd never been one for a one-track mind. Not in this lifetime.

But funny things happen when life's reduced to terminal stress.

She was waiting, suited up outside, standing by the powerplant, when I rolled up to the workpoint, scrunching into the airlock, cycling on through. I've seldom been inside a halftrack while someone else is coming aboard; the hollow thumping of knees and feet on metal and plastic, the odd lurchings, were all very unnatural.

The inner hatch popped open, filling the cabin with a faint alcohol and ammonia tang, quickly suppressed when Christie opened her helmet, folded it

back, pushed aside by human gastrointestinal smells.

I remembered an old story where that'd been the smell of Titan, because its author was thinking of methane and swamp gas, barnyard smells and all.

Silly.

They put butyl mercaptan in natural gas so you'll smell a leak.

Her face had a damp, suffocated look, as if being in the spacesuit made her claustrophobic. "Let's go," she said.

I unclutched the tracks and set off, lurch of the cabin throwing her against my shoulder, felt her brace herself, keeping what distance she could, not much in this little space. How much of what I'm feeling is fossil emotion, old subroutines frozen in my head?

I don't know what I want because I'm afraid, is that it?

I said, "Christie? When are you going to tell me what's going on?"

When I turned my head to look, her face was no more than a hand's breadth away, but facing forward, eyes not blinking as she watched familiar Titanscape come and go. Overhead, from down in the bottom lands, the eclipsed sky was the color of a fresh bruise, blue and gray, dull purple, tinted with vague streamers of magenta.

Then she turned her head toward me, eyes on mine. That brought her close enough we were breathing on each other. You know how that goes. You get in each other's facial space and there's tension there, because the next move is that forward craning, that . . .

She looked away again, not outside, just at the inner surface of the wall, at a circuit breaker panel mounted about eve level, "Did you tell anyone else?"

I shrugged. "Nothing to tell, I guess."

No answer. Tension in the arch of her neck. I wanted to reach out and touch her, tell her some nonsense about how it'd be all right. Then, with my arm around her, with her space invaded . . . there's something about the vulnerability of fear, about there being some terrible thing wrong. She said, "Pull up here. Let's get out."

We'd come to the cliffs by the beach, but were still some distance from the

familiar way down, rolling one at a time out the lock, then following my earlier tracks to the place where I'd spied on her before. They'd been joined by numerous other footprints now, hundreds coming and going.

All hers, I guess.

There was a thin wisp of black smoke rising above the instrument package, like an elongated drop of india ink in clear water, rolling with the convection currents, just beginning to dissipate.

And, all around it on the beach, were swipes and smears of color, shades and shapes moving round and round, all so very slowly. As I watched, a dark blue one came close, stretching out a long, narrow pseudopod. It came within a few centimeters of one support leg, hesitated for a moment, then touched.

The pseudopod shriveled, shrinking quickly back toward the main body, which seemed to roll over, turning to a lighter shade of blue, then sinking

into the beach, gone in an instant,

There was another black curl in the air, rising above the instrument package, drifting slowly away as it dissipated. I thought of the sample I'd taken of that earlier instrument contamination, presumably still in the halftrack refrigerator where I'd left it.

Little beasties investigating the alien machine. Innocent little beasties getting themselves killed.

Is curiosity just a tropism?

Moths to the flame.

I said, "I guess that makes your case, hm?"

I don't know what I expected next, but she said, "Turn off your radio now." "Um . . .

She turned and put her hand on my arm. I couldn't feel it through the suit

material, but those big eyes, begging . . . I switched it off and waited. She just turned away, quickly stepping to the edge of the cliff, dangerously close given the fragility of this chemical ice, and pulsed the carrier wave power setting of her suit's comm system, one, two, three, off,

All very much like in a movie.

Down on the beach, the waxthings froze in place, a conscious freezing, just the way a spider will freeze the instant it realizes you're looking. That sudden crouch, alien eyes pointing your way, spider brain filled with unknowable thoughts.

I remembered the way one of these things had grown a speckle of orange dots before and recalled a science film I'd seen as a kid, high speed photography of slime molds in action. Eerie. Not more so than this

Suddenly, between one frame and the next, the beach was empty.

In all those old movies, old stories, they get the feeling of this moment terribly wrong, don't they? I reached for my comm controls, but Christie, catching my movement from the corner of one eye, raised a restraining hand.

Wait.

Down on the beach, a flat, ragged-edged plain of blue formed. Time for a few heartbeats, then a sharp-edged stripe of pink slid across the side of the plain nearest our vantage point.

Then a conical shape slid into view from the other side, visibly falling toward the pink.

Falling.

Just before it hit, there was a reddish-orange swirl under the blunt side of the cone. It slowed to a stop, popping out little landing legs, flame gouting on the surface they wishing out.

the surface, then winking out.

Little blue and green dots appeared, embedded in the pink, drawing in toward the motionless cone. As they drew close, one by one, they would turn black and vanish. After a while, you could see they'd learned to keen their

black and vanish. After a while, you could see they d learned to keep their distance, hovering around the edge of the picture.

My mouth was dry as I switched on my radio and whispered, "How the hell

do they know what our sense of perspective is like?"

Whispered, as though someone might be listening. Some thing.

Her voice was hardly more than a breath, blowing through my earphones: "They're not really two dimensional creatures."

It's not Flatland. They're not waxy paintings on the surface of the ground. Fire blossomed under the cone and it lifted off, climbing out of the picture, and all the remaining blue dots turned black before vanishing.

After a while, more of them crept from the edge of the picture, creeping through the pink toward the place where the cone had been. At first, the leaders turned black and died, but only for a little while. In time, they finished their investigations, then went sliding on their way.

shed their investigations, then went sliding on their way.

The blue plain with its empty pink strip vanished suddenly, and the beach

was empty again.

I turned to her and said, "Why'd you show me this?"

Seen through the faceplate, she was nothing but eyes. Big blue eyes. Serious. Frightened. "I won't make this decision by myself. I'm not..." Long hesitation. "You know."

Yeah. Not God. That's how that one goes.

Back at the habitat, after a long, silent ride, we sat together in our longjohns, made tea and drank it, made small talk that went nowhere, circling round and round, as if something had changed, or nothing.

We're dead men here, I'd thought on the way back, watching a snowdrift blow across the beaten path before the halftrack, slowing down as if to stop, then suddenly lifting off in the wind like a flock of birds making for the sky, clearing the way for us.

Fewer than two thousand survivors . . .

In the old stories, old movies, that would've been more than enough, two thousand hot, eager Adams and Eves, getting about their delving and spanning, wandering the freshly butchered landscape, pausing by the shores of an infinite, empty sea, being fruitful, multiplying until they'd covered the Earth again.

This star system no longer contains an inhabitable planet.

Bits of memory, snatches of Moonbase newsreel. When Oberth gets home with the crew of the Venus orbital station, who hadn't had to commit suicide, she'll be bringing a stockpile of hardened probes intended for research on the surface of Venus.

Hardened probes, and, of course, one of the piloted Venus landers.

Then we'll know for sure. Then we'll . . . Couldn't stop myself from imagining, ever so briefly, myself on that first

damned crew, riding the Venus lander down through howling brown muck,

down to a soft landing in my own backyard.

I've been on Venus. I'm qualified for Venus EVA ops. I . . .

Read a science article when I was a kid that described the Chicxulub impact at the KT Boundary as being "like taking a blowtorch to western North

America."

The image in my head was a double exposure, the image of collapsed and

burned-out cities, like something from an atomic war fantasy, superimposed over the reality of a cooling lava ejecta blanket.

Just wisps of smoke.

That's all that's left of her.
Christie, face pushed down in the steam from her teacup, was looking at me strangely. God knows what my expression must have been like. Did you have anyone, Christie Meitner, or was it only strangers that died? Billions

and billions of strangers.

She said, "I guess we'd better talk about it now." Unsaid, Whether we want

to or not.

I nodded, not knowing what I wanted, looking into a face that wasn't all that expressive. A face not so different from my own. I tried to remember what I looked like, call up the man in the mirror, but there was only fog, no way to know what she was looking at now with those big, hollow eyes.

She said, "It's so simple, Hoxha: They're alive, and this is their world. If we stay here, even just the few score of us, Titan's environment will slowly

change, until this is no longer an inhabitable world for them."

And then? Right.

"Does it make a difference now that we know they're intelligent?"

She shook her head. "If we work together to keep it secret, to keep the others from stumbling over this, once we go away, back to Moonbase . . ."

I said, "The Earth's not going to recover and we can't survive forever at Moonbase. The Saturn system's our best bet, otherwise we're spread too thin. Even Mars..."

She said, "The odds are against us, no matter what."

I nodded.

"So we come here, obliterate the Titanians, and then die out anyway, erasing their future as well as ours."

Does this mean anything? What's my next line? I know: Christie, this is proof positive life is common in the universe. Right. Idiot. I remember the way she'd looked, face so pale, eves so big, standing behind me with the ice

axe, willing herself to kill. How many Titanians would've exploded and burned under the beach had my blood been spilled?

I said, "So that's what all this is about? Some good old-fashioned eco . . ." Right. Like the idiots who protested Cassini's launch all those years ago.

while not doing a damned thing about the world's hundred thousand hydrogen bombs.

Pick your targets. Some are easier than others.

She seemed tired. "It's not just that. If it was just about them being living things, intelligent living things, you wouldn't be sitting here now." "Dead and buried?" I smiled. "That would've been hard for you to explain."

"I wasn't thinking clearly. I was panicked that you'd . . .'

"What, then? Why am I still here?"

Long, long stare, still trying to fathom if there was a human being behind my face, someone just like her. She said, "Day before vesterday, I found evidence that their life process involves some kind of directed nucleosynthesis."

You could see the relief in her face. There, I've said it, And . . .

Nucleosynthesis?

Talking about details is what we're doing. In those old stories, old movies, the details are always important, imaginary science chatted up by happy, competent characters until God springs

from the machine and utters his funny-elf punchline. Now?

Not important.

Not anymore.

And yet . . .

I said, "That could tip the scales in our favor. We come here, we learn to exploit them, we survive as a species."

Her face fell.

I don't think she expected me to see it that easily. Probably there was a scenario in there in which the pedantic teacher ex-

plains things to the gaping mechanic in the simplest possible terms. That's the story way, isn't it? She sat back in her chair and sighed, "I don't know what we should do. Do

you?"

People love to pretend they make rational decisions. It's called excuse-seeking behavior. Christie and I sat facing one another for a long time, tension making it seem we were about to speak, but we never did. You want to be the first one to start offering up excuses? No, not me. How about you? If it was

important enough to reach for that axe, surely . . .

I wasn't thinking clearly.

Right.

So we talked about the evidence, which she explained to me in the simplest possible terms, until I was able to pick up the thread and begin spooling it into my own knowledge base, understanding it in my own terms. Understanding. That's an important part of making excuses for what you do, isn't

Or what you fail to do.

Think about the possibilities, Christie,

Think about the technology we could build here. Think of the resource

base. And the Titanians? Is it important what happens to them? In the end, we slept, I curled up on the floor, Christie huddled in her bed, back toward me, curled in on herself, head down in the vague shadows between her body and the wall. I lay awake for a while, trying to think about the whole damned business, trying to convince myself. God damn it, that it mattered.

When I awoke, however many hours later, Christie was on the floor beside me, asleep, not touching me, head on one corner of the folded-up blanket I

was using for a pillow.

Lisa never did that. Lisa always had to touch me while we slept together. sometimes huddling against my back, other times insisting that I curl myself around her like a protective shell. I remember when we were very young and new to each other, how I used to wake up sometimes to find her breathing right in my face. Breathing in each other's breath, I used to call it. As intimate a thing as I

could possibly imagine.

So, awakening, breakfasted, we got in the halftrack and went back down to Waxsea beach, where the fairy tales of science were waiting after all.

I don't know what made me stop the halftrack up on the terminal scarp. Maybe just some . . . sense of impending something. Maybe just a longing for the view. Christie stared at me for a second or two when I told her to get out. Stirlings vibrating the frame below us, idling down in the track trucks. Then she nodded, folded her helmet over her face, pressurized the suit, wrinkly off-

white skin suddenly growing stiff and shiny, obliterating her shape. When the depress valve had woofed, when I could see her out the cockpit window, I had a sudden memory of an old TV commercial from the retrofad

going on when I was in grammar school, Pillsbury Doughboy, Doughboy. Funny. Wonder if those long-dead copywriters imagined him with a tin-plate helmet and bayoneted Enfield, marching upright and stal-

wart into the machinegun fire of No Man's Land.

I think she was relieved when I joined her on the surface, no way to tell through the suit visor, just those same eyes, with their same expression, a pasted-on affect of surprise, fear, resentment. But she followed me to the edge of the cliff, where we stopped, and I let her get behind me, image of the

ice axe fresh enough, hardly mattering. And, of course, there was the cliff. One hard shove and I'd float on down to

. . I don't know. Gravity here's low enough I might survive the fall, given that two bar atmosphere, but . . . would my suit?

I imagined myself exploding like a bomb.

Overhead, the sky stretched away toward the absent horizon like a buckled red blanket, crumpled clouds of coarse wool, dented here, there, everywhere with purple-shadowed hollows, little holes into nothingness.

Down on the silvery beach, the instrument platform was ringed by motion-

less blobs, each ring a single color, blue, green, red, violet, working their way outward from the hardware.

Christie grunted, "Never saw that before," Radio made it seem like she was inside my suit, pressed up against my back, chin on my shoulder, speaking

If you looked closely, you could see the blobs were connected by thin strands, monochrome along the rings, blended between, Slowly, one of the blobs extended a pseudopod toward the platform. That's right. In a minute, it'll blacken and curl, shriveling in on itself until the parent blob goes belly up and sinks out of sight. Will the ring close up then, each soldier in that row taking one easy step, forward into an empty space, like Greeks in a phalanx?

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Christie said, "I wonder why they do it?"

Inviting certain death in the pursuit of knowledge? Good question.

The pseudopod slowed as it came close, flattening, widening, forming a sort of two-dimensional cup on its end, a cup that drifted slowly back and forth, arcing along the surface, a few centimeters out. After a moment, beads of yellow began forming at the cup's focus, detaching, speeding back up the pseudopod to the parent blob. From there, they replicated, spreading around the ring, then outward.

I said, "Think they know we're here?"

The first blob withdrew its pseudopod, while the next one in line extended an identical . . . instrument? Is that the right word? Examining the next section of the platform's heat shield.

Christie said, "I don't know. Their radio sensitivity's not that great. I always have to turn the carrier wave full blast to get their attention." I turned away, stepping back the way we'd come, "I guess we should just

go on down and . . .

Not sure what I was going to suggest. Christie gasped and put out a hand. gripping my forearm hard enough that my suit was compressed, forcing the liner up against my skin, feeling like cold, damp plastic, making me shiver slightly.

When I looked back, down on the beach, the rings had broken up, blobs perfectly spherical now, appearing and disappearing in the cracked ice, like colored ping-pong balls bobbing in a tub of water. Bobbing in unison.

One, two, three . . .

They exploded like so many silver raindrops, reaching out for one another, merging, spreading like a cartoon tide, until the beach below was a solid silver mirror filling the space between the cliff, the sea, the instrument package, reflecting a slightly hazy image of the red sky above, complete with streamers of golden light coming through little rents and tears, picking out the drifting snowbanks like dust motes on a lazy summer afternoon.

Somewhere overhead, I saw, there was a tiny fragment of rainbow floating

in the sky.

The image in the mirror grew dark, dimming slowly, as though night were falling, though the real sky hung above us unchanged, streamers of light tarnishing, red becoming orange then brown, bruise blue, then indigo, almost hlack

Almost, for freckles of silver remained.

Freckles of silver in a peculiarly familiar pattern, bits of light clustered here and there, gathering to a diagonal band across the middle and . .

Christie's gasp made me imagine warmth in my ear as she recognized it a fraction of a second before I did. Well, of course. She'd seen the real thing a lot more recently than I had.

The stars dimmed, Milky Way becoming just a dusty, dusky suggestion of itself.

Christie's voice: "How? How could they see . . ."

A bright silver light popped up in the center of the starfield, circled by dimmer lights, some brighter than others, most white, some colored, this one blue, that one red.

Tiny bright beads began flying from the blue light, swinging by orange Jupiter, heading for yellow Saturn, some stopping there, others flying on, disappearing from the scene.

In a row across the bottom of the image, bottom being the side facing us, flat, near-schematic representations of spacecraft appeared, matching each try bead as it flew. Little *Pioneer*. The *Voyagers*. Cassini and *Huygens*...

Voice no more than a hushed whisper, Christie said, "I wonder how long they knew? Why they waited so long and . . . why me?"

If they knew about Pioneer, then they knew about us when my father was

a little boy, my grandfather a young man, reveling in the deeds of space, imagining himself in the future, still young, strong, alive, and happy.

Down on the beach, the solar system faded, leaving the hint of starfields behind; then, like a light winking on, blue Earth appeared, oceans covered by rifted clouds, continents picked out in shades of ocher, hard to recognize, cir-

cled by a little gray Moon.

I could feel Christie's hand tighten on my shoulder, knowing what was coming.

There. The asteroid. The brilliant violet light of the hydrogen bombs. The spreading of the fragments. The impacts. The red glow of magma. The spreading brown clouds.

I wondered briefly if they'd had something to do with the rock coming our way. No. That's just an old story thing, pale imagination left in my head when I was a child.

One of those damned things we teach our children because we don't know what's real. Don't know and don't care.

Somewhere in my head, a badly fueled story generator supplied images of what would come next. Down on the beach, the image of a tentacled alien would form. Something not human, but within the reach of terrestrial evolution, would stretch out a suckered paw, inviting.

Take me to your leader.

What was I remembering?

"The Gentle Vultures"?

Maybe so.

Down on the beach, the end of the world faded, replaced by a white disk,

wrinkled in concentric rings. It tipped around, as if in 3D motion, showing us complex mechanisms, considerable mechanical detail, obvious control systems. I said, "Freenel lenses." Christie said, "They could see though the clouds with that, if they could build it for real. See the sun, the larger planets, the brighter stars, as natch-

build it for real. See the sun, the larger planets, the brighter stars, as patches of heat in their sky. But . . ."

es of near in their say, but ... The infrared telescope was replaced by an image of Titan, recognizable by the topography of Terra Noursae, Titan stripped of its clouds. The image rotated, showing the Waxea hemisphere, Waxea bearing interconnected contated, showing the Waxea hemisphere, Waxea bearing interconnected con-

tated, showing the Waxsea hemisphere, Waxsea bearing interconnected concentric rings, some gigantic version of the array we'd first come upon here. Christie said, "Long baseline interferometer. With enough computation..."

If they could build it. Nucleosynthesis?

I said, "How do you distinguish between a life process and a technology?" Christie said, "Oh," sounding surprised.

Imagination builds nothing. Not even the knowledge of how to build. Not unless you can somehow project it into the real world.

unless you can somehow project it into the real world.

Down on the beach, another image formed, a fantastically detailed portrait of the cosmodrome, showing the two landers upright on their pads. On the ridge above, tiny blue Titanians waited at a safe distance, ominous, like In-

dians looming above the ambush, foolish cavalry waiting in the defile.

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A blue sphere rolled down, making for the little ships. I waited for them to be spun down, like tenpins before the ball.

It rolled to a stop, not far from the ships. Tiny, spacesuited humans connected a blue thread to the ball, to the ships. The ball shrank away to nothing. The ships took off, unrolling red flame as they climbed through an orange overcast and were gone.

Behind them, the base and cosmodrome disappeared, one component at a time, leaving an empty landscape behind.

Christie sighed in my headphones.

Just one more all-too-familiar fairy tale, that's all,

Below, the silver screen cleared again, reforming as faint stars against velvet dark, surmounted by a slow-moving orrery of the solar system. Beads of light moved from Saturn to blue Earth-brown, I thought. They should've made it hmwn

The sky stood empty. Christie said, "I guess . . . " I whispered, "Sending us home to die then?"

Another bead appeared, crossing from Earth to Saturn, then going home again, Then again, Then again, More beads, this time from Saturn to Neptune. After a while, the voyages began a three-way trip, Saturn, Neptune, Earth.

What's at Neptune? Triton, of course.

I remembered how much I'd always wanted to go there, almost willing to abandon Lisa just so I could see diaphanous gevsers rising against a deep blue world, out on the edge of the infinite.

Christie seemed somehow hollow, as if she were speaking from the depths of a dream. "They send us home to the Moon. Help us to survive with trade and ... I ..." She stopped.

What are you thinking about, Christie? That you might see the atmospheres of the gas giants after all? Is that it?

She said, "We could never mine tritium from the atmosphere of Jupiter, where it's free for the taking. Not in that radiation environment. Not anytime soon "

Tritium. Out of the depths of the past, I suddenly remember the Daedalus designs, so long forgotten.

She said, "Even out here at Saturn, there's a deep gravity well to contend

with. And the collision danger from equatorial ringplane debris spiraling in. Nentune . . . Low-density gas giant with all the tritium we might want. And a big ice-

moon for the Titanians to . .

A myriad of bright sparks suddenly emerged from the Earth, moving not

toward another planet, but receding into the background sky, sky whose stars grew bright again, while the fleet of sparks grew smaller and smaller, until it merged with an unremarkable pattern of stars.

Christie muttered, "Something in Pavo, I think. I was never very good with

the lesser constellations." Delta Pavonis?

Is there a planet there? A planet just like the one we lost?

I said, "You think their technology's that good?" She looked up at me, still nothing more than big eyes looking out through

scratched, foggy plastic. "Maybe not. Not out here in the ice and cold. But put together with ours . . .

Maybe so.

I said, "I guess the decision wasn't ours to make after all,"

I awoke in the middle of the night, opening my eyes on darkness defiled by blue light from the instrument panels, perched on the edge of the bunk, curled inward, shadow of my head, shadow of tousled hair cast on the habitat wall. Christie was bunched into the space between my body and the wall, curled in on herself, the two of us damp and soft against one another, sharing some soft old blanket.

Somewhere outside, a new day is dawning.

Some time during that day we'll have to make our decision, get in the halftrack, go on back to base and . . .

What will happen?

Oh, nonsense. The fantasy we've just been through was no better than one more iteration of White Man's Burden. The decision's been made. Not by us.

All we have to do is carry out our part, speak our lines according to the

Lights, Camera, Action,

script. Fade to black.

If I held still, paid attention, I could feel Christie's back against my chest, moving slowly in and out as she breathed, pausing briefly before reversing direction. Asleep, I guess, I tried hard to remember what Lisa'd felt like sleeping against me.

Faded and gone, like just about everything else.

I listened for the soft sound of breath coming and going through what I imagined would be an open mouth, hollow breathing like the ghost of a snore, but the sounds of Titan coming through the habitat wall blotted it out. Sighing wind close by. A large wind farther away, moaning in the hills. Tidal creak of the deep crustal ice coming to us through the floor.

Christie seemed to sigh in her sleep, pressing back against me ever so

slightly, like something from a dream.

I remembered the lights merging with the stars and found myself dreaming of a new world, of standing on a hillside under a crimson sunset, alien sun in the sky, sun with prominences and corona plain against the sky, some-

thing from a remembered astronomical illustration. Something from a children's book. As in all children's books, there's a woman under my arm, standing close

against me, standing close. Below us, below the hillside, was a rim of dark forest, trees like feathery

palms swaying in a tropical breeze, beyond it, a golden sea, stretching out flat to the end of the world. Us?

Or just a dream?

Christie stirred suddenly, turned half toward me, nuzzling her head against my shoulder, and murmured, "Maybe things will . . . work out after all."

After all that.

It was a moment before I realized what she meant.

Another moment before I felt the burden lift out of my heart, ghosts hurrying away to their graves, one more golden tomorrow awakening from a dream O

Down in the Dark





We've seen some odd Christmas tales over the years, but rarely have they been as nutty as . . .

FRUITCAKE THEORY

Illustration by Mark Evans

jorn is trying to tell me that the rooster isn't dumb as a spoon. Obtuse, maybe. Naïve, yes. Tedious, without a doubt.

The rooster is sitting across the aisle and up two seats, paying no attention to us. We're just followers. He's staring out the window of the van at the snow.

"He's Kuvat, Maggie," says Bjorn. "Aliens think differently than we do."
"Cranial capacity." I tap the side of my head. "Check that skull. He's got room up there for half a cup of brains, tops."

"Maybe he's got some kind of distributed nervous system," Bjorn says.

"How else could they have built the starship?"

"The scarecrows built the starship," I say. "The roosters came along for the

ride. You follow long enough and it's obvious."

"Intellectual bifurcation is just a theory." Nevertheless, Bjorn slides down
in his seat, defeated once again. "All we know is that they're Kuvat, both
roosters and scarecrows." He takes out his appetite pacifier and starts suck-

ing at it. I don't mean to upset him.

The rooster starts eeking to himself.

"Eck eck ecech, eck ececk!"

He looks like a cauliflower the size of a washing machine—with legs. They are bird legs, to be sure, with scaly shanks and clawed, three-toed feet. But his body is an enormous scoop of convoluted flesh. All he wears is the translator, a golden disk that hangs on a cord around his neck like the Noble Prize for Stupidity. His skin is as translucent as spilled milk. Beneath it are coils of muscle marbled with gray fat. He has spilled yarms and his little head is mostly mouth. We can't see the upright ruddy flap, like a rooster's comb, just behind his button eyes, because tonight he's wearing a Santa's cap of red felt.

oemind mis button eyes, because tomigin the s'wearing a santa's cap of red teit. Bjorn pops the appetite pacifier out of his mouth. "I think that's 'Jingle Bells," he says excitedly. "The eeking." He makes a note of this. Bjorn is new to the following team. He's twenty-four and takes every-thing too seriously, except himself. He's fat and blond and sweet as a jelly donut. I really do like him, he just hasn't realized it yet. He brings out the mother in me.

num; ne just hasn't realized it yet. He brings out the mother in me. I yawn. I'm not a night person and I'm riding in a van at two in the morning. It's the rooster's fault, of course. It's December 22 and the rooster has got a bad case of holiday spirit, even though he doesn't know an elf from an elephant. He wants to do a little shopping. It's a security nightmare, but we accommodate him. We always do because we're asking for the Kuvat encyclopedia for Christmas. Not that we know what's in it exactly, but these creatures come from a planet a hundred and thirty light years away. They bound to have a grand unified theory, the secret of cool fusion, and a true for cellulite.

=Persons?=The rooster turns toward us. =This one has hunger.=
"Me too. I haven't eaten since dinner." Bjorn is always happy to interact
with our charge. "Wait until you see the food court at this mall. It's totally
grade. Must be thirty different kinds of ethnic." He's starting to bubble with
enthusiasm; I give him a needle stare. "Well, maybe only twenty," he mutters.

=This one has also thirst, persons.=
"This one is called Maggie." I touch my chest. "Mag-gie." The rooster can't tell humans apart. This continues to annoy me; I've been following him for four months and he still doesn't know who I am.

=Laughing all the way, person, ha, ha, ha.=

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There is some debate as to the accuracy of Kuvat translations.

I'm sick of this rooster. I've asked to follow any other Kuvat, preferably a scarecrow, but I'd even settle for another rooster. As far as we know, there

James Patrick Kelly

are four besides this one. Roosters don't have names, don't ask me why. At first we gave them nicknames-Dodo, Dopey, Dumbo, Ding-dong, and Dufus-only when Balfour found out, she pitched a fit. Our job was to follow, observe, and protect the Kuyat, she said, not to make snide remarks. She doesn't even like us calling them roosters. When she overheard Jasper laughing about "Dopey" back in August, she pulled him from the following team and banished him to Waste Assessment, where he sifts through Kuyat garbage and samples their sewage.

This rooster has been the most rambunctious tourist of the five. Since the Kuyat landed in May, he's been to the pyramids and the Tai Mahal and the Eiffel Tower. He's crazy about zoos and disneys. He saw the third game of the 008 World Series and was a Special Guest at the Sixty-Sixth World Science Fiction Convention. He seems to be partnered with Kasaan, the scarecrow who is the leader of the Kuvat expedition.

Biorn has signed on to the theory that the roosters are scouting us and make detailed reports back to the scarecrows, who rarely leave the compound we've built around their starship. This theory is conveniently unverifiable. since we're not allowed to follow roosters onto the starship.

When we pull up to the entrance of the Live Night Mall, Balfour herself gets onto the van. She nods at the two of us and then approaches the rooster.

"You will have an hour. I'm afraid that's as much as we can do, one hour. These two will accompany you for one hour. Anything you want, these two will obtain for you. Do you understand everything? These two? One hour? "Even though she won't admit it, it's obvious that Balfour, too, thinks that the rooster hasn't got the brains that God gave to spinach.

=Kuvat pay? That is the habit.=

"No," said Balfour. "These two will pay for everything."

=Person, is there fruitcake? This one hears much of the information of fruitcake.=

"Fruitcake?" Balfour glances back at us, as if we have some idea what the rooster is talking about. Bjorn shrugs. "I'm sure there's fruitcake somewhere at the mall." Balfour says.

=The fruitcake solves much hunger.=

As we get off the van, Balfour touches my arm. I let Bjorn go on ahead with the rooster.

"Any trouble?" she says.

"Not so far."

"Well, there is now. Kasaan is on her way here from the U.N."

"Here as in here? Why?" She gives me an exasperated glare. "Maybe she realized there are only two

more shopping days until Christmas." Balfour is as mystified by Kuvat behavior as the rest of us, but she's Undersecretary for Alien Affairs. When people have questions, she's expected to give answers. Sometimes that vein in her left temple pulses like a blue worm.

"You want to pull our guest out?" This would be the first time a rooster and a scarecrow have met outside the starship compound. It's a chance to observe new behaviors-but the mall is so public.

"I don't think so. No."

"Tell him about Kasaan?"

She rubs her eyes and I realize that she probably dragged herself out of bed for this. "Maybe he already knows. Look, I've seeded the mall with our peo-

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ple. We're going to let this happen, okay? It's the good old observe and protect. I just wanted to give you a heads up." She turns away but catches herself. "How's Biorn working out?"

"He should do more sit ups." She sighs, but the vein subsides. "It's two-thirty in the morning, Maggie.

Not even Hack Bumbledom is funny at two-thirty in the morning.

"Want me to pick you up some fruitcake? It's full of information." "This could be big." She brushes snow off my shoulder. "I'll be in the secu-

rity office.

Followers and their families are scattered strategically around the room. When we take roosters on field trips, we try to minimize their access to the mundane world. If we can, we clear a site completely; otherwise we drop by unannounced and late at night. We're in and out before the media and the Kuvat chasers and the oddjobs arrive. There are a few civilians shopping at this ungodly hour, and of course the staff of all the stores are mundanes, but we've got good coverage.

The Live Night Mall is "Y" shaped. Ribbons of light hang from its vaulted glass ceiling; they shiver in the warm breeze that blows from the ventilators. Each of the arms is lined with the usual assortment of shops selling games, infodumps, shoes, T-shirts, ties, hats, kitchenware, software, artware, candy, toys, candles, perfumes and pheromones. You can get a skin tint, a hair style, or walk-in liposuction. At the end of each of its arms is an anchor store. a Sears & Penny, a Food Chief, and a Home Depot. The three arms come together in a vast, garish, and noisy cluster of fast food storefronts. Bjorn might be right about the number of ethnics: I don't think I've ever seen Icelandic in a mall before. At the hub of the mall there must be a couple of hundred round tables. The surfaces of each are screens tuned to themed cable stations. Even though the place is pretty much deserted, it's still filled with the ghostly mutter of news and sitcoms and cartoons. I'm expecting to spot the rooster here somewhere but all I can see is a handful of followers and a Santa nodding over a latte. Kevin Darcy pushes his sleeping four-year-old by me in a stroller and murmurs, "Sears and Penny."

So I pick my way through the maze of tables. As I pass Santa, he shoots out of his chair.

"Where did you come from?"

"Home," I say and try to get by,

"No, you didn't." He pushes in front of me. "You're a stranger. Who are all these people?"

"This the mall, friend, We're all strangers here." "Not at my mall, you're not," he said.

"Listen, why don't you take the rest of the night off?" I flip open my wallet and give him a good look at the ID. "I'll bet you're tired. I'll clear it with your

He glances at it, but I don't think he sees anything. "It's not him," he says uncertainly. "It's all the presents. I have to finish my list." Now I'm just guessing at his story, but I'm pretty sure I've got it right. He's old and broke and stuck in Social Security shock-just trying to earn a few extra bucks over the holidays. Only he hasn't actually moved to a night schedule, so he's trying to tough this shift out with chemicals. That's why he's just south of coherent and has cephadrine eyes. "If I go, they'll replace me with a Santabot." He lowers his voice, "They don't take bathroom breaks."

"Excuse me." I sidestep him. "I have to see a rooster about a fruitcake."

"Wait! I'll put you on my list." He clutches at me, "What do you want for Christmas?'

"How about someone else's life?" He considers this and I slip by. "You can have mine!" he calls after me. "Hey!"

As I enter the Sears & Penny, I notice an odd, stinging, flowery smell, something like the scent of a rose, only with thorns. I follow it to the men's underwear section, where it is so strong my eyes water. A mundane sales clerk is tapping, "Silent Night," on the keypad of his cashcard reader,

Biorn and the rooster are sitting on the floor on a red and white checked plastic tablecloth, having a picnic. The rooster's Santa cap is cocked at a rakish angle. He has opened a plastic bag containing three white Fruit of the

Loom undershirts. He is eating them.

Somehow he has also obtained a four pack of Murray's Chocolate Mint Wine, two of which are now empties, =Hungry?= He holds a wine-stained rag out to me.

"No," I say, "thank you." I try to catch Bjorn's eye but he is staring between his legs as if counting the red checks on the tablecloth.

=One hundred percent cotton.= The rooster pulls a new undershirt from the bag and turns it this way and that, as if admiring it. =Tasty cellulose.= He opens another can of Murray's and pours some on it, =Not starchy like french fries.= He takes a bite.

The smell is clearly coming from the rooster. This is new behavior; I have

to know what caused it, "Uh, Biorn, could I speak to you?" He finally looks up, his eyes red and watery from rooster smell. "You think

I'm fat." He shivers like a barrel of Jell-O, then laughs out loud. "What?"

"Everybody thinks I'm fat. I am fat!" He spreads his fingers across his waist. Sure, Bjorn could do a creditable Santa without padding but what's that got to do with following the Kuvat? And what's so funny?

I try to say, That's not true, except the words swell in my throat like bal-

loons. I cough and manage to choke out, "What's going on here?" =He knows you bad or good.= The rooster says around a mouthful of undershirt. =so good good goodness sake.=

"He's not stupid, Maggie." Bjorn giggles and reaches for the last can of wine. "He just doesn't know what he knows." He pops it open and drinks.

"Bjorn!" I want to stop him but the rooster smell is blooming in my head. "What have you told him?" I'm not sure whether my feet are touching the floor.

=Kuvat not stupid.= The rooster chews with a sideways motion, like a horse. =This one sees. This one remembers. But only Kasaan knows.= "Kasaan? What about Kasaan?"

"It's the truth," Biorn says, "Want some?" He offers me the Murray's choco-

late wine and I snatch it away from him. =Cotton?= The rooster offers the bag of undershirts.

"No." I wave him off absently. "Maybe later."

"He's emitting some kind of euphoriant," says Bjorn. "Can you smell it, Maggie?"

=Tidal of comfort and joy, comfort and joy.=

"Yes." I sit down next to him. If I don't, somebody will have to pull me off the ceiling. "How did it start?"

"He was talking about Kasaan. He says she's going to empty him, or something. I'm pretty sure he's getting ready to turn in his report." He beams, pleased that he's finally won our argument, "I have a theory. He has to tell the truth, right? The smell makes him do it, feel great about it. And it's working on us too. Tell me a lie, Maggie."

=Lies stink = The rooster spits out the undershirt's polyester size tag.

"Oh god," I say, "Oh my god." I take a swig of Murray's and pass it back to Bjorn, "Kasaan is on her way over here." The chocolate weight in my gut helps me forget that I'm breaking every rule of following there is. By this time tomorrow, I'll be helping Jasper centrifuge Kuvat sewage.

=Person,= says the rooster. =You smell unhappy always.=

"I am unhappy," I say. "I've got a right to be unhappy." "Why is that?" Biorn asks.

"Because we have to follow this stupid rooster around, Bjorn! I don't know about you, but that makes me feel stunid. It should make everybody in the whole damn world feel stupid."

"Well, at least you're not fat." Bjorn laughs and hands me the Murray's.

Just to be sociable. I take a drink.

=Person is fat.= says the rooster. =Person feels stupid.=

I hear running footsteps. Our backup is coming fast. When I think of how this is going to look to the rest of the following team, I start to giggle. "We're screwed," I say.

"Very." Bjorn thinks it's funny too.

Balfour herself is leading the charge. "Maggie!" When she spots us she pulls up. She stares as if she has just caught Santa shoplifting.

I struggle to my knees and hold both hands out to warn them. "Get out of here, now! It's an airborne intoxicant." I realize I'm waving a can of Murray's

Chocolate Mint Wine at the Undersecretary for Alien Affairs. I set it discreetly on the plastic tablecloth.

"Gas masks in the van," Balfour says to the team as she covers her mouth and nose with her hand, "Clear the store, No, clear the mall, Seal everything," A handful of them peel off, running. The other followers goggle at us, then back away uncertainly. "Kasaan is looking for him," she says. "Are you okay?"

"Sure," says Bjorn. "Tidal of comfort and joy."

"I think we're all right," I say. "But we're not observing anymore. We're part of it, Balfour. Now move, before it's too late."

They leave, dragging the giggling menswear clerk after them. The rooster stands and brushes a few white threads off . = Person, is there fruitcake?=

We find fruitcake at the North Pole, a seasonal kiosk halfway down the Home Depot arm of the mall. The North Pole also sells ten different flavors of candy canes, boxes of assorted chocolates and Christmas cookies in green foil wrap, marshmallow elves, and fudge tannenbaums. Gene Autrey sings "Rudolph the Red-Nosed Reindeer" from hidden speakers as an animated Santa and his full complement of reindeer cavort around the circular base of the kiosk. I know it's the rooster smell which continues to float up my nose, but I find myself humming along with Gene.

The fruitcake is stacked five high in round red tins decorated with scenes of cherry-faced kids building snowmen and wrapped in cellophane. Bjorn takes one off the top and gives it to the rooster.

"This is fruitcake," he says.

The rooster takes it, turns it over several times, holds it up to the light and then taps a finger against the lid of the tin. =Is hard.= "It's inside." I shake my head, laughing, "You have to open it first."

James Patrick Kelly

The reacter glances up and down the deserted mall =There is no pay per-00m = Biorn is unwranning a white chocolete enowman "Don't worry We'll take

care of it "

=This one have That is the habit = He sets the fruitcake unemened back on the counter =Christmas is The Kuyat nay =

"No really "says Biorn but I nudge him in the back just as the rooster

begins to eek "Faggach ach ach son Faggh!" Reneath his translugant skin the flesh anpears to seethe. We can hear a sloshing, like a mon in a bucket of water. The rooster clans a hand to his chest and I see a viscous coze between stubby fingers. He brings the hand to his mouth and blows on it, once, twice, then onene it and chowe ne

=Pay = he says Biorn drops his chocolate snowman

Clicking softly on his smooth palm are four green nearls.

"What are they?" says Biorn.

=The end of fat.= says the rooster. He offers them to Biorn. =Person eats?= Of course I am immediately enenicious of the green nearly What is the end of fat anyway? What will these things do to the human digestive system? "How many?" Biorn's face is as soft as cookie dough.

"Wait a minute!" I'm stunned, but I can't bring myself to stop it. =The one =

"What was it you said Maggie?" He smiles at me "We're not observing anymore. We're part of things now." He accepts a pearl from the rooster.

"Thank you Do I chow?"

=Swallow hurry =

"Biorn!"

He pops it into his mouth and it's over. I wait for him to keel over and writhe or throw up or maybe even explode but he just watches me with that goofy smile, which I absolutely understand. Whatever happens is all right, is true, is good. We'll both accept it because the world smells so sweet tonight.

Biorn raises his hands over his head like a Sugar Plum Fairy and does a nirouette

When the rooster offers me the green pearls. I'm not at all tempted. "Thanks," I sweep them onto my hand and pocket them, "But I think I'll save these for breakfast."

The rooster's eyes glitter for a moment and go dim. = One = he says.

=Share.= He turns to the North Pole and retrieves his fruitcake.

The rooster wants to eat the cellophane wrapping but we talk him out of it. When we pry the top off the tin, he eeks and drops it, =Not Christmas!= The cake is still in the bottom half of the tin; it rolls toward the Playbot store.

=Fruitcake stinks!= He starts hopping up and down on one foot, =Stinks like a lie =

"I'm sorry," says Bjorn. "Maybe that one was bad. I can get you another." =Take it away!= the rooster says. =Bury it!=

"His hour is almost up." I say, "Let's get him out of here."

But we don't get the chance because striding toward us from the food court

is Kasaan. A dozen gas-masked followers trot behind. The Kuvat scarecrows have no more in common with our scarecrows than the roosters have with gallus domesticus. We call them scarecrows because they're so gangly and because they wear loud, loose clothes that cover most of their bodies. But nobody who meets a scarecrow ever remembers her

Fruitcake Theory

wardrobe. What you remember is the impossible head. It looks something like a prize pumpkin, only pumpkins aren't rust red or as wrinkled as walnuts. The eyes are like bloodshot eggs and the mouth is full of nightmare teeth, long and curved and pointed. If the scarecrows weren't so shy, so polite, so intelligent—everything that the roosters are not—they would've frightened the bejesus out of us.

At the sight of Kasaan, the rooster forgets all about the fruitcake and begins to eek furiously. Instinctively Biorn and I step back. The scarecrow is swooping down on the rooster; I've never seen one move so fast. The followers are left scrambling behind. The rooster tenses. He looks as if he wants to run

in five directions at once, but can't decide which one.

"Eek, eeek, eeeek, eeeeek, eeeeeek!" Just before it happens, I realize what I'm seeing. This isn't any meeting. It's an attack: a lion charging a wildebeest, a wolf taking a hare.

"Uh-oh," I say, but it's good. It's true. The smell has changed everything. Kasaan slams into the rooster, knocking him down. The rooster bounces,

rolls and lies, shivering, on his back. His legs pump weakly as Kasaan looms over him. The scarecrow bends to nuzzle the rooster's shoulder. He closes his eyes. His eeking is low and wet. The breathless followers catch up.

"What is this?" I recognize Balfour. "Oh my god, what's she doing?" Kasaan's nubbly pink tongue licks between bared teeth at the rooster's

shoulder. It makes a sound like someone washing hands. "Observe," I say. "But don't protect. Not this time."

The licking goes on for several moments. Suddenly the teeth pierce the skin and sink deep. The rooster stiffens, but makes no sound. With a quick jerk to one side. Kasaan tears an apple-sized chunk of the rooster's flesh away. Her jaws close on the meat-once, twice, three times-and then she tilts her head back and swallows. The wound brims with purple blood: Kasaan licks it clean. When the bleeding stops, the scarecrow steps away and stretches luxuriantly.

"What tasty information!" She offers a hand to the rooster, who struggles

to his feet, "You have seen most deliciously."

"I have a theory," whispers Bjorn, "about how these reports are made . . ." But he doesn't get to elaborate because Kasaan comes up to him.

"What that one gave you," the scarecrow says, "is the egg of a vuot, a worm that will grow over the years in your intestines."

Biorn turns the color of eggnog.

"How do you know about that?" I say.

"I ate those memories," says Kasaan. "Now the vuot is a beneficial parasite that all Kuvat share. It will filter toxins and regulate your metabolism and prolong your life. You need not worry about side effects. Indeed, I believe you will be most happy with your relationship with the yuot over the coming centuries."

I pat my pocket to make sure the pearls-vuot eggs-are still there. Kasaan notices this and bows apologetically, "What has happened, is and is for the good. But there is something that has not yet happened, which I must

unfortunately prevent from happening."

=Better not cry. Tell me why.=

I can guess what's coming. "We bought them from him," I say. "We paid." "Maggie, a fruitcake is not the price of immortality," says Kasaan gently. =Fruitcake stinks.= says the rooster. =Person lies.= His wound has already

healed. "I'm afraid I must insist." The scarecrow lavs a hand on my shoulder.

James Patrick Kelly

I know she means me no harm. So does the rooster, Biorn, Balfour, and all the followers. I'm going to give her the eggs. Maybe later we'll find out what the right price for them is. As far as I'm concerned, the situation is under control. But it's not my mall.

"Get your hands off her!"

It happens so fast, Santa comes from somewhere behind the followers, No one sees him until he goes airborne. He's spry for an old man, clipping Kasaan at the waist and spinning him around. The eggs go flying out of my hand and splatter on the floor. Santa and the scarecrow fall in a heap. "Monster!" screams Santa. "Get out of my mall!" He's got his hands around

the scarecrow's neck. We swarm over to pull them apart but we're a millisecand too late

Kasaan bites down hard on Santa's bicep. She tears off a mouthful of muscle and some red felt rags. Perhaps it's instinct that makes her swallow.

"Ahhh!" Blood spurts. Santa faints.

The scarecrow picks herself up slowly, licking the blood off her lips.

"Kasaan, I am so sorry," says Balfour, her voice muffled by the gas mask. "I thought we had secured the area."

Kasaan stares thoughtfully at her. "He is a senior."

"Old, yes," she says. "Poor thing probably doesn't know what he's doing."

"This is how you treat your elders?" "What do you mean?"

"We have made a terrible mistake," says Kasaan. "I wish to return to the ship immediately."

=And a happy New Year,= says the rooster, as he follows the scarecrow out.

Three days later, the Kuvat starship takes off. They have yet to return.

Barbara Balfour, Undersecretary of Alien Affairs, resigns in February, after taking a merciless pounding in the media and both houses of Congress. In March she signs a contract to write Who Lost the Kuvat?, which presents her side of what happened. Although sales are disappointing, the vein in her temple stops throbbing.

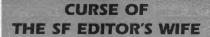
Biorn Lipponen loses one hundred and fifty pounds in six months. Two years after The Incident, as it comes to be called, he is named one of the twenty-first century's Hundred Most Sexy Men. Later, he becomes a noted futurist. His book. The Road to Eternity, is in its eighteenth printing.

Nobody knows quite what to do with Lester Rand, the demented Santa. There is considerable sentiment for charging him in the World Court with crimes against humanity. But who can say what will happen if the Kuyat come back and find out that we punished the messenger instead of accepting the message? In his later years, he writes a children's book, Reindeer in the Mall, which is optioned by Fox and made into a full length computer animated cartoon.

I am never going to write a book. I'm not going to live forever

There are a lot of theories about what caused The Incident. Some want to blame me for insulting the rooster, even though what I said was only the truth. Others say that it is humanity's fault for mistreating the Lester Rands of the world. Many former Kuyat chasers maintain that when Kasaan digested the information he bit off Rand, he saw into the dark soul of Homo sapiens sapiens and was repelled. I guess everyone has a theory. Here's mine.

It was the fruitcake. O





By plane, train, and automobile, by the bushel and the bundle, they arrive in a seemingly endless deluge of deforestation: quality wildly variable, quantity in the gross tonnage. Manuscripts! Manuscripts everywhere!

They rise in tottering towers to topple from his desk.
Across sofas and chairs they lie scattered like

flakes of gargantuan confetti. He even totes them to bed, where she hears but cannot share the chuckles and groans that punctuate his nights.

His critical faculties have reached such an exquisite pitch he has come to judge their lives with the same tedious exactitude he applies to his tedious craft. Is their environment fully realized? Are their characters believable? Can they hold their friends' attention?

When her bare instep is stabbed by a paper clip snagged in the carpet, she reacts out of all proportion to the actual pain involved, falling to her knees and sobbing, "I just can't stand it anymore! I can't stand it another minute!"

He glances up from his mammoth task to fix her with a disparaging glance. "Indefinite pronoun reference," he tsks. "Clichéd and overly dramatic. Try us with something more original."



Lisa Goldstein

Lisa Goldstein's most recent book, Walking the Labyrinth, was published in trade paperback last year by Tor. Her next novel, Dark Cities Underground, is a contemporary fantasy about subways and children's books and Egyptian gods. It will be out sometime this summer. In her charming new tale, we see what the rayages of time have done to the unusual players of . . .

THE GAME THIS YEAR





t is a little before midnight, and three old people, two women and a man, are laboriously climbing the stairs in a ramshackle old office building.

Lily, the youngest-looking of the three, carries a box-shaped package. She

looks like a woman you might see in a shopping mall or a church, though a little over-dressed and behind the times. The other woman, Grace, is wearing a long coat patched together out of sky-blue velvet and emerald silk and ivory lace and embroidered upholstery fabric. Her gray hair is tied back in a bun. and a tabby cat, the same color as her hair, rides across her shoulders. Collier, the man, is using a stout staff to pull himself up the stairs. All the bulbs have burned out; the only light, a soft golden illumination, comes from the top of his staff. He is bald except for a few tufts of white hair, like sheep's wool, that sur-

round his head. He stops, panting, and pushes up his round gold spectacles. They come to the third floor and head toward the office, at the end of the hall. Lily is moving too quickly; she steps on the train of Grace's coat. There is a tearing sound and the cat turns and mews softly. When they reach the office Lily opens her purse, takes out a heavy old-fashioned key, and unlocks

the door.

She switches on the light and they stand clustered together in the doorway for a moment. There is an old battered desk and chair in the office and nothing else. Dust is everywhere; it covers the furniture and is strewn across the floor. In the breeze from the open door it spins and coalesces in the corners the way stars are said to do out in space. The cat sneezes.

Lily sets down her bundle and flings open the window. The window does not look out on more office buildings but on a small park, the only patch of green in this city's downtown. She says a few words and the dust vanishes

out the window.

"They're late," Lily says.

"We're early, more like," Collier says. He shakes his watch and holds it to his ear. "This hasn't worked very well, these last few decades."

"At least we're not late," Lily says. "We never heard the end of it, that last time-"

"Oh, don't worry about that," Grace says, "Come on, let's play, They'll be

here soon enough. Lily arranges herself carefully on the floor, folding her skirt neatly beneath her. She takes the Risk game out of her sack and begins setting up. Grace lets the cat jump down from her shoulders and gathers her coat around her as she sits. "Oh, dear," she says, holding up the torn edge of the coat. "When did this happen?

The other two study the board intently. Collier rolls the dice.

"Went to a singles bar last night," Grace says. "You did not," Lily says. "How'd they let you in?"

"Oh. come now," Grace says. "I don't look a day over-"

"Over ninety," Lily says. The three of them laugh.

people didn't know what happened to them.

"I was watching the people," Grace says. "There were these two young people-Well, by the end of the evening they were in love. Just like that. They never thought it would happen to them." "Grace!" Lily says. "You didn't."

Grace shrugs, "It was so funny," she says, "They never expected it. I couldn't help myself.

"You'll be tired tonight," Collier says, "You shouldn't have,"

"I used to stay out three nights running," Grace says. "When I hit town,

"You were younger then." Lily says tartly, "Collier's right, Grace-you shouldn't have done it." They play silently for a while. Collier has conquered Australia and is

preparing to wipe out Lily's forces when a bell begins to toll.

They stop playing. Each counts silently as the bell rings out twelve times. "Midnight," Grace says.

They head to the window, looking for a glimpse of the other team. Lily sees

them first. "Good lord," she says. "Are they trying to wake up the entire city?" "Terribly ostentatious," Collier says, shaking his head, "They don't know

when to stop, do they?"

A blue and gold striped balloon is heading downward, toward the park below. A gust of wind comes up; the balloon swerves out over the street and bounces off a parked car. Suddenly, shockingly, a car alarm shatters the quiet of the night.

The balloon swings back over the park and settles down. Three people-

two men and a woman-jump out of the basket and secure it. Even at this distance. Grace can see that the other team is better dressed than she and her friends are, and that they move with more energy and confidence. It has been this way for the last several years. Grace thinks, if not decades, If not centuries.

She sighs. Well, perhaps this will be the year the tide of luck begins to turn in their favor, the year they finally start to win again.

The newcomers head toward the office building, and a few minutes later come in through the door. "Hello, hello everyone," Reg says, smiling. He is a

large man, with wavy brown hair and white even teeth. "Are you trying to wake up the entire city?" Lily asks again, pointing out

the window at the balloon.

"No, of course not," Reg says, still smiling. "Don't worry, Lily. No one will even notice."

Victoria comes into the office after him and nods to everyone. She removes

her leather goggles as she enters, shaking out her long red hair. Her hair is shiny with silver in places; Grace remembers when it was the color of a new penny.

"Oh." Grace says softly, trying to hide behind Lily, John has come in after Victoria. He is as handsome as she remembers, a compact man, dark, seemingly filled with unused energy. The years seem hardly to have touched him. She and John had loved each other many years ago, before they had moved the game to the United States. Where was it? she thinks. Lima? No, Shang-

"You've probably woken up everyone within miles." Lily continues, ignoring Grace. "The cops will be here any minute. We can just forget about the

"Come now, Lily," Reg says, "Do you hear cops?"

There is silence from the street below. Even the car siren has stopped. "They do it to show they can afford to, Lily," Collier says. "Ostentation, as I

said." "Well, folks," Reg says, "Are we ready to play?"

Lily puts the Risk game away in her sack. Victoria takes out the other board, the real one. This she unfolds until it covers nearly half the room. The six players range themselves around the board in a circle.

Grace finds herself sitting next to Victoria, who has apparently not fin-The Game this Year 57 ished pulling things out of her sack. Now she lifts out a small computer and sets it up on her lap.

Grace has never understood Victoria, whose only passion seems to be for mathematics. No, not her only passion, Grace remembers. Lily had had an affair with Victoria-when was it? Was it before her and John, or after?

Collier throws the dice, and Grace forces herself to concentrate on the game. They win the first turn. Reg glances at Victoria, his eyebrows raised. Grace feels a brief upwelling of hope at their consternation, Perhaps, just perhaps, the game will go differently this year.

Dice roll. Cards are drawn, pieces moved. In Madrid, a comet appears briefly over the rooftops. In Mexico City, a lame beggar stands and walks, in Caerphilly, a blade of grass trembles though there is no wind. Grace takes off

her coat. Lily stretches to relieve her back.

Victoria taps a few keys on her computer. "Ten," she says tersely, and Reg moves an onyx piece ten spaces. In the Tower of London, one of the royal jewels gains another facet. A mullah in Addis Ababa dreams of a revelation, but wakes uncertain, with the dream's meaning just outside his grasp. "Seven," Lily says with sureness, trusting to intuition. A cat closes its eyes in Vladivostok.

Grace finds her mind straying again, remembering other games, other centuries. Has it really been thousands of years since that first game, the one they played with stones and pictures scratched on the banks of the Nile? Victoria would know. Maybe she should ask her, when this year's game is over.

It has been so long that sometimes she doesn't even remember what they are playing for. Something about intuition versus reason, or tradition versus innovation; that was Lilv's explanation, anyway. Collier thinks the contest is between right-brain and left-brain thinking; he has pointed out that all of them are left-handed, while the other team is all right-handed. Grace thinks of it as wavy lines versus straight lines, though when she tried to put this

into words not one of them, not even her own team, understood it. Really, though, it doesn't matter, Lily tried to set her straight once, Lily whose fierce ambition it is to win the games the way they used to, all those

many years ago.

straighten.

What matters is power, Lily said. What matters is control, is who will get "Remember that red sports car they drove up in a few years ago?" Lily said

to oversee the board, and the world, for the next year.

once. "And that cellular phone they had? That's the sort of thing they can afford now, while we just get shabbier and shabbier."

"A sports car?" Grace asked, puzzled. "What would we do with a sports car?"

Lily had just looked at her in disgust.

The pictures on the board are deepening into three dimensions now. The first stage of the game is over and they begin to play for real, each feeling that they look over the rim of the world. Grace draws a card. She hears a shot fired and winces.

A storm rises up over the Greater Sundas. In Santa Fe, a picture slides off

the wall. A man in Sydney forgets his name. They are all concentrating now, so strongly that the building is changing around them, shifting as it goes through the various stages of its construction. Paint peels back to expose plaster, the warped boards beneath them

Grace holds herself up with her hand against the floor, which has acquired a bright sheen of polish. She feels tired, more tired than she would admit to Lily and Collier. With her eyes open she begins to dream, wondering if she is what they call senile now, if they will have to come and put her in a home. She dreads that more than anything in the world, to be in a wheelchair and helpless, to speak of her memories and have them taken for the ravings of a crazy woman. . . . She is dreaming of the time (was it a few years ago or a hundred?) when they had last been close to winning, and of the times before that, years uncounted, when the three of them had traveled the world, respected and loved. The sound of a siren cuts through her musing and she blinks to focus. "The police!" Lily says. She throws down her cards, "Now you've done it!

Someone saw that damned balloon of yours and called the police.'

What do you know?" Grace says softly, coming back to the present. "There's life in the old town vet!"

"We've got to get out of here!" Reg says. "Victoria-"

Victoria studies the board for a while, memorizing the pieces, and then nods. She throws everything into her sack, pieces of quartz and ebony, ruby and gold, and finally her laptop and the game-board. Grace draws her robe

around her and makes a hump of her back, and the cat leans to her shoulders. They hurry to the door and down the corridor.

Down the stairwell, Collier's light dimmer than it was at the beginning of the evening. Out the front door, around the back to the park, where they come face to face with the balloon. The sirens are growing louder.

"Come on," Reg says impatiently, "Everyone, Let's go,"

"In that thing?" Lily says. "Not a chance. I suggest you've forfeited the game this year by drawing the police. We'll see you next-

The sirens stop abruptly, "They're right in front of the building," Reg says, whispering urgently. A cold wind kicks up around them. "Come on-it's our only chance. Do you have any idea what the police would do to three old people with identification dating from the nineteenth century?"

"What's wrong with that?" Grace says dreamily.

Reg looks at her as if she's lost her mind. "I'll give you one last chance," he says. "John, jump in the basket and make sure everything's ready to go, Vic-

toria and I will untie the ropes. Ready?"

Grace and Lily and Collier look at each other. They can hear loud walkietalkies as the police come through the office building. Finally Collier says, "Why not?"

Grace shrugs. John hands down a footstool and they get into the basket. "Do you think it's a trick?" Lily whispers to the other two as Reg and Victoria

climb inside. John lets hot air into the balloon. "I don't know," Grace says softly. She thinks of the wayy lines described by the balloon's flight; she has felt an affinity with the balloon since she first

saw it. "Maybe it'll help our game." They cast off into the night. The police come out into the park; one of them points as the balloon lifts above the building. Another holds up the footstool

they left behind in their hurry and throws it angrily into the bushes.

The balloon drifts over the city. Grace wakes fully, watching the small streets and houses, the small cars still traveling at this time of night. She waves at the toy people in their toy cars. She is reminded of other wild nights, other glories. She breathes deeply.

An airplane blinks across the sky. Now Grace notices that she has ended

up next to John, that she is leaning against him in the crowded basket. "Look," she says, pointing, "An airplane,"

"We're too near the airport," John says, correcting their course, "Keep

watch for me. will you. Grace? They'll tell us when it's our turns."

"Sure," Grace says, feeling suddenly warmed against the chill, For the first time in a long time, she thinks that things might take a turn for the better.

though she still does not dare to look at John. Even Lily and Victoria are working together, she sees, setting the board back up the way it was. The six people shift in the basket, trying to find space around the board. Grace moves closer to John, "A helicopter," she says,

"To your left"

John nods and changes course. Lily and Collier, Reg and Victoria, begin the game again. "Twenty," Victoria says, tapping her keyboard, and then, "Thirteen,"

"Look at that," Grace says. "All those buildings built along the freeway, out

where nothing grows and there's no water."

Progress," Reg says with satisfaction, not taking his eyes from the game. John swings the balloon back toward the bright lights. The city lies beneath them, a much vaster game board with thousands of glittering pieces. The

night is utterly silent. Grace feels as though she is flying. Grace, it's your move," Collier says.

Grace turns with difficulty from the view beneath her and draws a card. Reg is smiling again, as though certain of the game's outcome, Grace pulls her robe closer

"Remember that time in Shanghai?" Reg asks. "We were nearly interrupt-

ed there, too, Soldiers, I think, wasn't it?" Grace finds herself blushing, unable to concentrate on the game. Lily has warned her about this often, has told her that Reg will do anything to win, to throw her off her game. She knows that Reg only mentions Shanghai to remind her of the time she and John had been lovers.

"It's your move, Reg," Lily says sharply, and at the same time John looks

up and says, "No, it wasn't Shanghai. It was much later than that."

"Was it?" Reg says. He turns over a card. "I thought it was somewhere

around when you and Grace ran off together, wasn't it?"

"Oh, stop it!" Grace says. For the first time that night she looks directly at John. "You stop him, you're a decent person. Though what you're doing in his service is beyond me." Flustered, she moves a jade piece without bothering to count.

Snow falls softly in the Atlantic Ocean. The players make their moves in silence, broken only by Victoria tapping on her keys and reciting numbers.

John clears his throat. "I stay with him because I am a decent person. Because I believe in what we're doing."

"Hah!" Lily says.

"Look at what we've done since we started winning," John says. "Medicine-vaccines and penicillin. Communication all over the world. Airplanes. Computers."

John's words remind Grace of the first time she used a telephone. It was only a few years ago; she was calling a neighbor of hers who had moved. She remembers how clear the neighbor's voice sounded, almost as if they were in the same room. An idea begins to grow within her, something new, something no one has thought of in all the long years they have played the game.

Lily is shouting, though, nearly driving the thought from her mind. "And look at everything else!" Lily says. "You can land a bloody balloon right in the middle of a major city and the only people who notice are the police. There's no wonder, no sense of the marvelous! You and your computers! Look what you've killed!"

Grace makes an effort to grasp the thought. She says quickly, before she can forget again, "I wonder what would happen if we joined forces? There's nothing that says we have to be antagonists down through all the ages of the world. Look how well we worked, escaping from the police. If we could somehow come together . .

The others, all except John, stare at her as if she has gone mad. They have stopped playing entirely. Finally Lily says, "I told you you'd be tired."

"Wait," John says. "She has a point. What if this whole thing, all our competition, is only a false dichotomy? What would happen if we did work together? What could we accomplish?"

"You notice they only want to end the game when they're losing?" Reg

It has nothing to do with that!" Grace says. She throws her dice to the

board. She is nearly crying.

"Grace," Lily says, holding her. "Don't." "We can go home if you like," Collier says. He leaves unspoken what the

three of them suspect: they will lose this game as well. "No, that's all right," Grace says, picking up her dice. "I've never left one

unfinished yet." They return to the board. Lily notices a move she has overlooked and

makes it triumphantly, glaring at Reg when she is through as if to tell him his ploy hasn't worked. A coin rolls down a gutter in Quebec. Slowly, though, the tide turns against them. Victoria wins all of Grace's

cards. A dam is built in Mongolia. A cloud flies across the sky over a small town on the Rhine. Reg makes the winning move; he stands up in the basket and hollers triumphantly. They can smell dawn coming from the east. Victoria begins to collect the

pieces of the game; they have won the right to keep the board again this year. "We can set you down wherever you like," Reg says.

"Away from the freeway," Lily says. "Away from the lights somewhere."

"Done," Reg says. The balloon starts to drift lower, hovering over undeveloped land. The land

comes up fast to meet it and they hit with a thump. Lily helps Collier over the side. Grace is still sitting on the floor of the balloon, frowning in puzzle-

ment. "Grace?" Lily says softly. Grace hands the cat to Collier and steps down, and then turns to help Lily, The balloon ascends, quickly growing smaller and smaller against the

"Damn!" Lily says, shaking her fist at the balloon, now no bigger than a

leaf. "Damn!"

"Oh, well," Collier says, sitting heavily on the ground, "There's still next vear.

Yes," Grace says, adjusting the cat on her shoulder. She straightens, summoning strength from somewhere. Another year in which to think about this new idea she has brought into the world, to study it, polish it, figure out a way she can present it to the rest of them so that they see it as she does. John is already on her side, she thinks. "Maybe next year," she says. O

Michael Swanwick (with Sean Swanwick)

ARCHAIC PLANETS:

NINE EXCERPTS FROM THE FNCYCLOPEDIA GALACTICA

Michael Swanwick is one of the most talented and varied writers we know. Lately, he's been prolific as well, turning out a dazzling array of fiction, ranging from hard science to weird fantasy, from the bizarre to the darkly tragic. Here, in yet another change of pace, he presents the solar system to us in nine short-shorts. This tale also marks Sean Swanwick's debut. He came up with the idea for "Jupiter" and co-wrote that seament with his father.





MERCURY:

"The Cathedral"

ercury was dead, to begin with.

Charred and sere, baked and roasted, sleeted with radiation—lifeless. Not the hardiest microbe could survive on its surface. None ever had. "It's a city, I tell you!" Landalfi cried. "The ruins of a city."

"Shut up," the Commander said. "There's a natural explanation. There has to be."

The ship landed in an open space—a plaza—in the center of a gridwork of

low foundations that reached to the horizon. The crew climbed down to the surface and stood blinking and bewildered.

"It can't be," insisted the Commander. Knee-high walls surrounded them.

"This sure looks like a street," Ringwald said. "Curbs, sidewalks, alleys off to the side . . ."

"And this is a house." Landalfi pointed. "Bedrooms here and here. Kitchen there. Living room. Water closet. Front and back doors."

"There's never been life here," the Commander muttered. "There couldn't be."
"Then what's this?"

"Inen what's this?"
Slowly they started down the street. After a few minutes, Landalfi said,
"Either of you notice anything?"

"Yah. The walls are higher."

They stopped, measured. Waist-high. They went on.

"Maybe," Ringwald said, "things used to be different. Trees, forests, oceans."

The Commander laughed harshly. "Cigarette trees and whiskey oceans! I'll believe in the Big Rock Candy Mountain before I'll believe in this."

"Are these walls higher again?"

They stopped. Landalfi made a scratch on a wall at shoulder height. After a minute, it looked higher to them. After three, they were sure.

"They're growing," Ringwald breathed.
"The ship!" cried the Commander.

As one they turned and began running.

As they ran, Landalfi wildly said, "I have it! It's the world—Mercury itself.

It's alive. And it wants us to know it's glad we're here."
"Now that's—"
They came to where the ship stood, and stopped. It was almost buried under

an enormous mass of stone, statuary, stained glass and flying buttresses—a cathedral ten times larger than Chartres. As they watched, the spire topped out. The bells began to ring.

VENUS.

"True Hietory"

ucian of Samasoto wrote his *True History* some six thousand years earlier. In it, he said his boat was sucked up by a whirlwind and carried off to the moon. He became entan-

gled in a war between the sun and the moon over who should own Venus. The armies included a Vulture

Cavalry, Saladbird Riders, Bean Shooters, and Flea Archers. These last were mounted on fleas twelve times the size of elephants. There were also Mushroom Fighters, with mushroom shields and asparagus spears.

This seemed to the staff of the Institute for Applied Parallel Realities to

serve as a good test case for their investigations.

They wished to learn whether the total range of universes was bounded by possibility or whether each created its own physical laws. Impossible worlds must, they felt, be impossible. But it wasn't a tautology until it was proved.

Under direction of the Chief Researcher, they set up an experiment with two equally likely solutions, chose that which favored their target state, and collapsed the alternative. Then another, and another. In this way, they sailed toward Lucian's universe.

"Success!" the Chief Researcher crowed upon arrival.

He was instantly shot down with a bean through the chest.

Then the armies of the sun and moon were upon them: not only the Bean Shooters, but the Gnat Riders, Radish Warriors, and Ant Cavalry as well. They attacked with a savagery that would have made no sense at all in the fallen Chief Researcher's universe.

His last coherent thought before dving was: How unreal this all seems.

EARTH:

"The Terraformers"



They returned to find Earth in sad shape.

Mankind had arisen, evolved, and departed for the
stars at the expense of the mother planet. The atmosphere was weak, the soil depleted, the oceans exhausted. The continents
were now mostly desert. The weather had settled into harsh, chaotic pat-

terns. There was serious doubt about the biosphere's long-term survivabili-

ty.

During their absence, the terraformers had transformed a hundred and twenty worlds into virtual Edens. They knew what to do. After studies and consultations, they set out to do it.

Word went out to the fleet: Get to work!

Giant robotic harvesters were set afloat in the atmosphere of Jupiter to gather the raw materials and synthesize the gigatons of fertilizer that would be needed in Phase Two of the project. Crèches were established on Titan and Ganymede to force-grow the tailored microorganisms that would be employed in Phase Three, the fish and insects for Phase Four, and the birds and mammals for Phase Five.

Meanwhile, Phase One was put in effect.

Using Locomotive-class plasma engines, seven iceteroids were boosted from the outermost ring of Saturn. A second burn sent them into orbits intersecting that of Earth. The engines were retrieved (the terraformers were nothing if not frugal), and the commanders sat back to watch the collisions

from stations they had established on the Moon.

The purpose of Phase One was to freshen the atmosphere of Earth. During the break-up and descent of the iceteroids, certain volatiles were released that would act as catalysts for the removal of endemic pollutants from the upper stratosphere. On impact the iceteroids converted a calculated percentage of their mass to energy. There were earthquakes, tidal waves, new volcanoes. The particulate matter these events threw up also played a role in the atmospheric restoration. For the duration of Phase One—ten years—these clouds covered the Earth so thoroughly that no sunlight whatsoever reached the surface.

This last simplified the task of restoration enormously. The terraformers had a complete genetic library for every organism that had existed on Earth at the time of their departure. Crashing the ecosphere eliminated all but the simplest of living organisms from their complex equations. They were able to recreate a vigorous and authentic set of interlocking ecologies without competition from life-forms whose genes might have drifted or been altered in the intervening millennia.

It also—not coincidentally—solved certain political differences the terraformers had with the government and people of Earth.

MARS:

"Manifest Destiny"

olonizing the planet Mars was the great enterprise of the late twenty-first century. Only the best and fittest were chosen for the adventure.

After two weeks' cramped travel, the colonists arrived on the barren Martian surface. They dug tunnels within the unyielding rock. They mined ice from the poles and built greenhouses along the equator, telefarmed by obedient machines.

They mined uranium and erected massive generators—the

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total lack of an ecosphere obviated any objections to the use of nuclear fuelsto power their nascent civilization.

Then, the gritty work done, they settled down in their tunnels to enjoy the fruits of their labor.

Mostly, they watched a lot of television



"The Sentinel"

upiter is an intelligence test. An alien race brought it to the solar system forty million years ago to watch over and encourage sapience on our planet. The forces setting it in place triggered a cataclysmic event that killed off all the dinosaurs and put certain small mammals in a position to become Homo Sapiens.

It also caused some serious cratering on Earth's moon.

Probes have been sent to Jupiter, and from them all the wrong conclusions have been drawn. The "red spot," caused by heat venting from internal engines, has been deemed a storm. The enormous and complex magnetosphere has been written off as evidence of an iron core. Nobody thinks to ask how the planet's garish appearance could possibly be achieved without artificial coloring

The sentinel device has not been passive. Hints have been dropped. Forces have been exerted to cause such manifestations on Earth as pickup

trucks levitating, alien abduction syndrome, and rains of frogs. To no avail. Even the "grevs" have not been taken seriously.

Just how intelligent are humans? The answer seems to be: Not very. Any thinking being would see at a glance that Jupiter was artificial. A truly intelligent one would immediately know what to do about it. So far,

nobody on Earth has made the obvious connections. They'd better hop to it, though. Even alien patience is not unlimited. A new sentinel is being readied.

Maybe cockroaches will turn out better than we did.



SATURN:

"The Lord of the Rings"

t was easily the most boring job in the universe.

Carthage, Cowcaddens, Chewinggum, Cod. Cobblestone, Cauliflower, Charlemagne, Cow. Chippendale, Carbondale, Collycibber, Chaw.

Hank Graham spent his days—eight hours a day, with two breaks and unch—naming rocks. Coeurleone. Specifically, his job was to name every microsatellite orbiting Saturn. Castlemayne. A methodical man, he started with the largest rocks of the innermost ring and worked his way outward. Callforphillipmorris. He was working on the grade IV rocks of the C ring now. Crag. Chowmein. Cindylou. Since the smaller a rock was, the more there were of that crade it was a job that theoretically could go no forewer

there were of that grade, it was a job that theoretically could go on forever. Cucumber, Cyberprep, Calculus, Cork. Cummerbund, Cosanostra, Cliia, Clerk. Crayola, Cog. Cantwealliustgetalong, Coffeestain. Crustbunny.

There were fifteen reconnaissance robots slowly making their way through the rings, photographing every god-damned microsatellite and sending their data back to Earth in squeezed bursts, each rock tracked and tagged so it could be located again if anybody ever wanted to, and the photos-and-tracking-data sent directly to Graham's desk where, because some bureaucrat somewhere had once had an idea that anything NASA dealt with should have a name, he did his thing.

Candide, Cupiedoll, Crazvoldlady.

Graham had wanted to be an astronaut. He would've settled for being independently wealthy, handsome, athletic, admired, or even brilliant—it would've been enough if just one of his three marriages had lasted. He would've settled for that. What he got was nothing. Nothing but the scorn of men, the disregard of women, and a job where nobody ever looked at his would've settled.

Capriccio, Cosmiccookie, Cheesemong—What was that?

In the center of Series 11458, Image 47DD/3, was something metallic,

on the center of Series 11458, Image 47DD/3, was something metallic, something artificial. A derelict machine, larger by far than anything

mankind had ever managed to put into space. By the look of its pitted surface, it had been orbiting Saturn for a long, long time.

Graham stared at the thing in silence, thinking. Then, as the keystrokecounter on his workstation began blinking angrily to demand that he get back to work, damnit, he briskly typed out; Couldhavebeenyoursifyoudtreatedmebetter.

Whistling, he went back to work. He named another thousand rocks before quitting time.

URANUS:

"You Must Remember This"

he was beautiful and willful. I mean Uranus, of course. Not the Captain. Captain Frazier would ream me out good if she thought I was speaking of her in such terms. Still, a man can have thoughts.

Our mission came to Uranus-or-

bit for the helium. Eleven percent of the atmosphere is helium, with the rest

hydrogen, methane, and a few trace elements. All the naturally occurring helium on Earth had been frittered away, centuries ago, on party balloons and Donald Duck voices. Now the

economy needed a massive infusion of the stuff. We had three ramjet collecting-and-processing modules. We'd lost two already, and their pilots as well. Now Captain Frazier wanted me to fly down

the last one.

"I'll do it," I said, "if you promise me a kiss when I get back," "I'd promise you the Pope's god-damned cherry, if that's what it took,"

"Just a kiss." I said softly, and climbed into the cockpit.

Down I went.

I figured out almost immediately what had killed the other pilots. The thick atmosphere scattered sunlight in a uniformly creamy blue-green daz-

zle. It was strangely soothing. Hypnotic.

Which was a dangerous state to be in when six-hundred-mile-per-hour winds rose up out of nowhere to slam you up, down, sideways, to flinders. I needed all my wits about me. But the windshield didn't shutter and the instrumentation

was all heads-up readouts. So it was stare into the dazzle or die. I fought it. I sang. I bit my tongue. I slammed one hand into the metal

side of the cabin over and over again. When all sensation was gone from it, I did the same thing with the other hand.

And, by God, I made it. I came up out of Uranus with a broken hand, a mouth full of blood, and enough liquefied helium in the hold to keep civilization together long enough to fund another expedition.

The Captain was waiting to welcome me on the observation deck.
"Where's that kiss?" I asked.

"You didn't think I was serious, did you?"

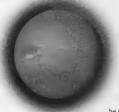
And she gave me such a look that I very quickly said, "No, sir!" "Good."

She kick-floated away, leaving me staring at the soft and creamy bluegreen planet below. The atmospheric temperature there was roughly -220 degrees C.

She's one cold bitch. Uranus, I mean.

NEPTUNE:

"Rescue Mission"



he was no longer human.Clarissa Wu stared unhappily down at her body—thick and sex-less, hunchbacked and insanely muscled, horn-plated, twisted. "What have you done to me?" she wailed. She had been beautiful once. A week ago.

"It's reversible," they told her. "Do what we tell you and we'll make everything good."

A technician briefed her. "You'll be dropped into the upper atmosphere. Temperature 70° K—that's thy you're so heavily insulated You'll fly

why you're so heavily insulated. You'll fly down to the liquid core. Don't open your wings

here, there's not the room. The battleship has five different kinds of emergency beacons broadcasting continuously. You'll find a sensor for each one on your harness."

"Will I be going all the way down to the surface?" she asked.

"There is no surface," somebody said scornfully, "only a liquid core."

Inere is no surrace, someoody said scorniumy, only a inquia core.
"You may have to tear open the ship's hull to get in. With those arms and
talons, it'll be easy. Find the Admiral's life-capsule and bring it back. Ignore
the others. They're not important. Only the Admiral is indispensable.

the others. They're not important. Only the Admiral is indispensable. "Swim back to the liquid-gas interface, catch the wind, and spiral upward. Flying will be instinctual for you. We've programmed it into the hindbrain. Make your way up as high as you can go. It may take a few days, but you've been adapted for the task; you can literally manufacture food from methane and ammonia. That's why your gills are so large.

"There'll be a glider circling in the upper atmosphere. Trigger this device here—" he tapped something on her harness—"and it'll fly down to snatch the capsule." He paused. "And you, too, of course. Do you understand?"

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Miserably, she nodded.

They took her down as far as they dared, and tumbled her out into the monosphere. For a few seconds the winds buffeted her helplessly about, and then her hindbrain took over and she spread her wings and flew.

Okay, she thought, the first thing to do is-

Oway, see though, the list still go do 18— She stopped. The cold stratospheric winds of Neptune flowing smoothly over her wings and across her insulated body felt—pleasant. No, delightful! The atmosphere was turbulent, wild with upwelling clouds and sudden downdrafts. To her enhanced senses they were ravishingly gorgeous pillars of glowing gold rising against a backdrop of profoundest blue.

Wonderingly she circled downward.

The surface of the water-alcohol-ammonia sea, when she spotted it, was lashed with storms. Down through them she flew, laughing and dodging the lightning bolts that were sudden flashes of estatic joy. She saw something leap free of the ocean and fall back with a splash. Life! Food! A plaything!

She swerved in a wide upward loop for the sheer joy of it, and all the transponders on her harness began to beep and chitter and nag at once.

She frowned.

What was it the technician had said? That she could literally manufacture food from the clouds. Indefinitely. Which meant that she didn't actually need to go back.

She could live here forever.

If she'd been human, the need for companionship, approval, mental stimulation, and the presence of her own kind would have driven her to do as they wished. But she was no longer human.

One by one she plucked the devices from her harness and fed them to the winds. Then the harness. So much for the battleship. So much for the Admiral. Now nothing existed but the creature that had once been Clarissa Wu and the world that was hers and hers alone to explore. She shivered ecstatically.

Spreading her wings, she caught a thermal updraft and soared.

PLUTO:

"Foundation"

hen the Sun finally went nova, property values went up and down all over the solar system. Mercury, Venus, Earth, and Mars were the big losers, swallowed up within the red giant that the Sun became. The outer planets underwent some alterations, but survived. Pluto came up golden.

The Wise Ones of Earth, mankind's distant and perfected descendants. saw the disaster coming from afar. They knew there was no escaping annihilation. And they accepted their fate.

They were, however, concerned about their successors. Life is tenacious. Where it can arise, it will. But where the Wise Ones had enjoyed four billion years of evolution beyond mere humanity, they knew that any new life arising on the outer planets would have only a single billion years before the collision of the Milky Way and Andromeda galaxies filled the neighborhood with exploding stars and hard radiation. A billion years was not much time in which to advance from simple chemicals to full sentience.

They decided to shorten the interregnum. Starting with their own genetic materials, they extrapolated backward, creating precursor chemicals that must inevitably and rapidly lead to life and with them seeded the frozen ices of Pluto. Microscopic machines or viruses—at that scale, there was scarcely any distinction—were also devised to guide the primitive life forms upward into structures of increasingly greater complexity and understanding.

Finally, they adjusted the planet's mass, so that it would be able to hold an atmosphere.

Their work was good. When the flames engulfed them all, they had the satisfaction of knowing they had done what they could.

Time passed. Pluto's frozen oceans thawed.

In less than a hundred million years—an eyeblink of time—intelligent life arose on the coral islands of the outermost planet. The Plutonians were a gentle race, intelligent, perceptive. When they had finished the hard work of creating a fair and workable civilization, they paused to consider the problem of life in the universe.

We can't be alone, they reasoned. There must be other life somewhere.

We can't be alone But where? Where?

They turned their telescopes outward, toward the stars.

Unnoticed, the dust of fossil engines swirled about their feet, the only trace of that ancient love that was the foundation of their race. O

(for Isaac Asimov)

We appreciate comments about the magazine, and would like to hear from more of our readers. Editorial correspondence should include the writer's name and mailing address, even if you use e-mail. Letters can be e-mailed to asimovs@erols.com or posted to Letters to the Editor, Asimov's, 1270 Avenue of the Americas, New York, N.Y. 10020. Letters may be shortened and edited for publication. The e-mail address is for editorial correspondence only—questions about subscriptions should be directed to Box 54625. Boulder. CO. 80322-4625.

Robert Reed

Love and interplanetary war are only two of the cosmic upheavals found in Robert Reed's . . .

BUILDING THE BUILDING OF THE WORLD

Illustration by Shirley Chan



The young woman looked up at me with a well-placed wariness, informing

me, "They call themselves quiggles."

"Quiggles?" I said.
"Yes," she snapped. "That's their name. What's wrong with it?"
"Nothing," I said, but without much heart.

Her team squirmed in their seats, glancing across the table at one another. The universe's first quiggle existed as a holo projection: A headless blue ball with stubby arms and legs, cat-like green eyes riding on stalks, and a huge mouth stuck on its equator. The bioengineering problems were obvious and ordinary. Where was the brain? The sex organs? The rectum? How could those limbs work without hips and shoulders? How did such an enormous mouth operate without long muscles anchored to bone? And speaking of the mouth, where did it lead? Opened wide, that maw would nearly split the body in two, leaving little room for a digestive tract . . . which is perfectly fine if you're a digital fiction, and perfectly awful if you're made of proteins and salt water. But I didn't question the morphology, At least not at first,

Something else about that mouth bothered me more: Meaty lips were pulled up at the corners, exposing twin rows of big white teeth. An omnivore's teeth. The quiggle was smiling at me. And in case I didn't know what the smile meant, one of its pudgy, three-fingered hands was waying at me. neighbor to neighbor.

I looked back at the human faces, settling on their self-appointed leader. "Go to the zoo," I told the young woman. "Go there and climb into the chimp pen and smile at the alpha male. Just once. Just to see what happens."

She didn't blink. In a cold clear voice, she asked, "Why?"

"That chimp will assume you're threatening him. Chances are, he'll teach you never to smile again."

Her name was Catheryn. I barely knew her, but from her snobby attitude, I guessed that someone—a parent or a trusted teacher—had mistakenly assured Catheryn that she was a terribly creative ape.

"Your quiggle is smiling," I growled. "I told you," said one of her teammates. An introverted wisp of a boy named Taylor, he sat up straight and said, "I knew he wouldn't like the smile,"

Catheryn punished him with a serrated stare. Then she dismissed me by remarking, "On Quiggle, smiles are friendly."

Most of the others nodded, showing a frail certainty.

Let it pass, I decided, For now, I looked at everyone except Catheryn, "What else can you tell me about

quiggles?" And when they didn't respond, I prompted them with something basic. "What do your quiggles like to eat?" "They're vegetarians," one girl replied,

I nodded appreciatively. Many fine organisms never indulged in meat.

But then Catheryn said, "On Quiggle, every animal is a vegetarian. There aren't any predators at all."

The others watched me, trying to gauge my mood. It was our fourth day together, and they'd already seen my biases at work.

I glanced at Taylor, the quiet boy. "Comments?"

He squirmed and shrugged his shoulders. "That's not very likely. Is it?" "Why not?"

"I don't know." He stared at the carpeted floor, "Something would evolve to eat meat . . . eventually . . . Not on our world," Catheryn snarled.

Meat is energy," I pointed out. "Nature doesn't like wasting energy." Catheryn gave me a blistering stare. "Our world is peace-loving. Nice. We've already agreed that's the way it is."

Others grumbled their approval.

They had a compelling point; it was, after all, their world.

So I changed the subject. "Okay. How many quiggles are there?" "Ten thousand," Catheryn blurted.

"Total? Worldwide?"

Everyone, even Taylor, nodded in agreement.

I stared at the projection standing in the center of the table, at the alien's smile and its relentlessly cute body. Bracing myself, I said, "What kinds of technologies do these ten thousand critters have?"

"Very little," Catheryn assured.

I felt tired suddenly. The kids were baiting me, hoping for an explosion of logic, but instead I simply shook my head, reminding them, "You have to have radios. That's one of my big rules."

Catheryn smiled. Smelling sort of victory, she told me, "Okay. We have one radio."

What good was a single radio?

But I ignored the idiocy, telling her, and everyone, "Thank you."

She kept on smiling, showing me an omnivore's teeth. And it was a decidedly unfriendly smile—a challenge of authority, of dominance, and undoubtedly as old as our preposterous species.

I was a teacher before I was paid to write, and writing being what it is, there have been moments in the last thirty years when I needed food money. Or more recently, money to squirrel away for my retirement. An administrator at the state university contacted me last spring. Would I be interested in a stint at a science camp for gifted high school students? I made my usual eager sounds, and a meeting was arranged.

The administrator turned out to look a little like the future quiggles. He was more pink than blue, but with the same general proportions and smile. Pleasant in a relentless way, he shook my hand, saying, "I'm Dr. Mitchell Larrs. Call me Mitch."

"Franklin Salo," I replied. "Frank is fine."

Mitch belonged to the teacher's college. His office was a shoe box decorated with an assortment of holo-posters and animated murals done by former students. With a thick dose of pride, he told me, "About half of the state's science teachers have come through my program. Did you know that?"

Not until then, no.
"It's good to meet you," he told me. "Tve never had the chance to read your work, but neonle sure talk highly of it."

I didn't know whether to bristle or grin.

I didn't know whether to bristle or grin.

"Camp is in July," Mitch informed me. "We draw imaginative students from across the state, and they'll live here on campus for two weeks of constant activity. Core classes. Seminars. Guest lecturers, and field trips."

"Sounds ideal," I offered.

Then he gave me a preliminary class list, and I felt like amending my first impression. Prairie Ecology and Fun With Your Mass Spectrometer were mixed with gems like UFOs In the Twenty-first Century, Famous Haunted Houses, and Gaia Loves All of Us.

"Our focus is creativity. We want to give our students a diversity of views, freeing them from their mental boundaries." The New Mysticism jargon was supposed to make me feel at ease, but it had the opposite effect. "Our core classes run in the mornings, for ten sessions." A wink. "So, Frank. What sort of class would you like to teach?"

I coughed into a fist, then said, "How about world-building?"

The concept seemed to drop to the floor between us.

Finally, summoning up a dollop of curiosity, Mitch said, "Okay, I'm a student. How would world-building look to me?"

The quick and dirty description took five minutes, Basically, I would divide my class into teams. Then with my ungentle guidance, each team would fabricate an alien world out of known science and plausible speculations. They would build a planet, the lifeforms on and in it, and finally, an intelligent species. And when that was finished, I had one more activity that was sure to challenge the young savants. Mitch cut me off in order to tell me, "It sounds fascinating,"

I liked to think so.

"Of course you'll have access to the University's computers," he told me. Then before I could respond, he added, "I'm sure we can find you some helpful programs."

When I first taught the class, I used a chalkboard, and my students-now entering middle age-sketched their ideas on simple paper, "There's a lot of

excellent software," I replied. "But most of it does all the work for them. Which misses the point.'

Mitch gave me a vague look, perhaps missing my point, I named a simple software package popular in my profession.

He nodded amiably, saying, "Whatever you need, Frank."

"And bright kids who know their science," I replied. Mitch laughed, telling me, "These are the best educated students in history, Frank, They'll be teaching you."

One cliché holds true: Kids really don't change much.

Meeting my class on that Monday morning, looking past their peculiar clothes and bizarre, highly contrived customs, I could see the same teenagers

who must have once bedeviled their Cro-Magnon parents.

I introduced myself, then mentioned, "When I first taught this class, there were nine known worlds." On my signal, a portrait of our solar system appeared on the main screen. "The nine included Pluto, which was wrong. Pluto is only an ambitious comet."

Seventeen students sat before me: Seven were up front, and the others, in-

cluding Catheryn and shy Taylor, were scattered in the rows behind them. Does anyone know how we found the first extrasolar worlds?"

I like asking questions, gaining some sense of what's known. In that case, silence was the only answer. So I told them about the millisecond pulsar with its peculiar worlds that were built, we now knew, from the rubble of a supernova.

Notebooks were running, absorbing everything I said and did. Most of the faces were politely uninvolved. The only exception was a tough-looking girl with Mandelbrot hair and a golden nose chime, leaning forward in her seat,

paying close attention to me.

I marched into my lecture, laying out the basic rules for planet formation while displaying photographs from our new hubbles. I described just a few of the four hundred known solar systems, trying to give them a feel for what was possible. Then I came back to the alien world that we knew best. Mars. "Automated rovers have found extensive fossil beds. And some people hope to find living organisms in the deep aquifers . . . if we can ever pony up the dough for a human expedition, that is....

A hand shot up in the back row.

Before I could say, "Yes?" the hand's owner was treating me to his opinion. "But you're talking about bugs. Nobody's ever actually found anything important. Have they?"

"Important?" I said. "Bugs are boring," he warned me.

It was an opinion with supporters, judging by the nods. I made a quick decision. Instead of wasting my breath describing the vent communities on Europs or the prebiotic wonders of Titan. I moved straight to the business of what "important" life requires. I talked about energy and atmospheres, sol-

vents and the ability to grow and reproduce-Another hand shot up. A fragile young girl confessed, "I don't actually be-

lieve in evolution. Will that be a problem?

"Yes." I admitted, "it will be a problem." Then I told the entire class, "For the next two weeks, we're going to be working in a specific universe. The universe known to science. And I'll warn you, as far as you're concerned, I am God."

I paused for a godly moment, then thundered, "The theory of natural selec-

tion is my most fundamental principle!"

Before the next morning, three students had transferred to the UFO class. "Two more wanted to jump ship," Mitch informed me, disappointed in someone. Them, or me? "But I promised you're not trying to convert anyone to your faith system."

Faith system? "I hope that's okay, Frank, Okay? Okay,"

I ended up with fourteen kids, enough for two teams of world-builders.

One of my basic principles is that each team needs a spark plug, someone who knows enough or has the simple enthusiasm to become a credible god. From what I saw. I had a pair of spark plugs. Taylor, the quiet boy, knew more science than anyone else—in that disjointed way common to the young. facts not quite meshing into the Big Picture. And there was the girl with the nose chime. She was Sally Masterson on my shriveling class list, but on her nametag, in shouting red letters, she had written PEPPER SPRAY.

I built my teams around those two.

Catheryn didn't yet exist. Or rather, she was simply that handsome if somewhat bleak looking sixteen year old who sat in the backest back, staring through me while I lectured, betraving nothing. Not boredom, Not disapproval. Not so much as a neutral word in two full mornings of lectures and

questions. I didn't remember her name from one morning to the next.

I injected her and the other back rowers into Taylor's group for a lousy reason. Penner Spray and the front rowers had already built a team spirit, complete with trading insults and slugging each other; and why should I break

them un? I admonished everyone to keep what they were building secret, then led Taylor and his baby gods into the adjacent classroom. Then I vanished, giving them a little vacation from me before I started bouncing between the teams, helping and hindering as I saw fit.

A world, like a person, takes about an hour to be conceived, and it's never finished.

The newborn world filled the room's main screen: A colorful, almost gaudy sphere, it had a purple and a green ocean, one on each pole, and a single golden continent encircling the equator. Rivers ran between the oceans in a hydrological system inspired by Escher. I asked for a closer perspective. The computer took me on a quick flight over the surface. Up close, the terrain was

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mostly flat, a ghostly vagueness clinging to every surface. It was a symptom of youth, and temporary. Following the team's guidelines, the simple software was continually evolving, creating details at the hundred meter level now, soon to be followed by the ten meter level, and the meter level, and so on. In principle, the map would eventually achieve quark-accuracy, although we'd need a computer larger than our world.

A stream of questions occurred to me. I picked one at random, asking,

"What's your atmosphere like?"

Taylor's head was down, his face genuinely embarrassed.

It was the silent girl who answered, looking straight at me with hard green eyes. "It's pure helium."

I read her nametag before my memory engaged. "Why helium, Catheryn?"

"It's different," she replied, pointblank.

I waited for a long moment, hoping that someone would mention the obvious. But when it didn't happen, I asked, "What do you know about helium? Its chemical properties, its atomic weight..."

"It's inert," Taylor squeaked.

"A noble gas," I added. "It doesn't react with any element. Which is going to be a problem if you want to run a metabolism."

"It's not a problem," was Catheryn's response.

"Besides," I said, "it's very light. What's your surface gravity—?"
"Seventy percent of Earth's." Taylor muttered.

"Which means that it'll lose its atmosphere in a geologic wink."

Catheryn made a sound. Unrepentant, even scornful.

"This just isn't possible," I declared.
"You don't know our world," she warned me, "Our world's different."

Bullshit, I thought.

"Bullshit," I said.

Taylor risked saying, "I told you it wouldn't—"
"Quiet," Catheryn barked. Then with a cold, dismissive tone, she looked up

at me. "You're a very narrow-minded person, I hope you know."

I waited for a half second, then said, "Thanks for the critique."
The others were watching her. I could practically smell the solidarity in the air. And it dawned on me, a little too slowly, that there had been a coup. Taylor had been ushered saide. If he'd ever been in charge, the noor kid.

We hammered out a compromise. Their world was cloaked in an earth-like atmosphere, and its polar seas changed level according to the season, the rivers running north for part of the year, then reversing themselves—a pattern that would never remain stable, in the real universe. But at least I'd gotten the team to accept helium for what it was. . . .

The other team, by contrast, seemed glad to have my advice.

"We've talked about oxygen," Pepper Spray told me. "But we'd really like something better."

mething t "Better?"

"Better?"
She grinned, then said, "Meaner,"

Gleaming smiles proved that she was speaking for everyone.

Gleaming similes proved that she was speaking for everyone. I mentioned possibilities. Chlorine. Fluorine. Various radicals. But definitely not helium. Then I brought up the issue of cosmic abundances. Our hubbles have found plenty of terrestrial worlds, but the only biologically active gas seems to be oxygen." Then, after letting the bad news sink in, I, added, "Of course oxygen is a pretty mean gas on its own. There are several added, "Of course oxygen is a pretty mean gas on its own. There are several

giant terrestrial worlds with huge partial pressures. Some researchers think that life has evolved to deal with those concentrations. Life where the smallest spark would cause an intense fire, and anything combustible would detonate like dynamite." Pepper Spray's team glanced at one another, then in one voice called out:

"Mean!" And with an amiable violence, they punched each other in the shoulder.

Worlds are built on themes.

Quiggle was a mild little world circling a modest G-class sun. Its people were round and smiled perpetually, eating nothing but golden leaves while living extraordinarily long lives. They didn't have farms or cities, and so far as I could tell, there wasn't a trace of industry. Quiggle was lovely like a welltended lawn is lovely. An elaborate set of rings were added as an afterthought. I couldn't help but point out that rings are inherently unstable; the equator would be bombarded by meteorites. That prompted Catheryn to give me a chilly look, remarking, "They're small meteors, and we like to watch them fall."

The other team's world employed different themes, and it was named hon-

estly and without any pretense of originality.

Hell Two suns. The primary sun was M-class. Hell moved around it in a Mercurv-style elliptical orbit, turning once every two-thirds of a year. But that little red sun was nothing compared to the aging F-class monster that lived next door. Riddled by age, its massive body was swelling, engulfing its own family of worlds. Heat and hard radiations had already changed the face of Hell. Oceans had shriveled in the brutal climate. A high-oxygen, high-gravity ecosystem had partly collapsed, leaving behind the most vicious species. And the natives fit that scene perfectly: The Spawn had armored bodies, four spidery arms, and a single pogo-style leg that carried them across a landscape on the brink of oblivion.

It was a fun creation, for them and for me.

Pepper Spray had designed the Spawn's face. It was insect-like, in a glancing way, and blessed with a carnivorous mouth that could never twist itself into a smile.

My team-and I thought of them as my team-invented an elaborate culture and history. The Spawn were highly social, thoroughly asexual. Each of their cities had grown from a single ancestral parent; an individual's loyalties were to "her" family, first and always, Competition between the cities was fierce. Peace was unheard of. The quietest member of the team—a pensive girl whose name escapes me-spent a sleepless night weaving a digital of a typical war. It was very Hollywood, and its core, silly. Why energy beams should move slower than bullets. I have no idea. But in that ten minute work, I watched a city sacked, its inhabitants artfully slaughtered, and every reinforced structure blasted to rubble . . . everything happening in the light of a swollen, dving sun.

Meanwhile, the guiggles—the other team had begun calling themselves by their aliens' name-invented a much tamer existence. Colorful images of flowers and smiling vegetarians played across the monitors. In an invented, vaguely musical language, quiggles sang praises of their beautiful world. Catheryn even took the trouble to sew her own quiggle out of cheap felt and pillows stolen from the dorms, carrying it under her arm everywhere she went.

Perhaps noticing something in my expression, Taylor asked, "How's the other team coming?"

I said, "Their world . . . is interesting. . . . "

Catheryn lifted her gaze. "As interesting as ours?"

What could I say?

Then Catheryn answered the question for herself. "But we don't care what they're doing. It's not as interesting, and we don't care."

"Hearing good things," said Mitch, sitting on the opposite side of the cafeteria table, something in his voice distinctly surprised. Or was I being paranoid? "Some of your students seem pretty excited with what's happening."

I was eating lunch. My sessions were in the morning, and normally I went home for lunch, then worked through the afternoon. But this was Friday. For the last thirty years, I'd made a point of investing an afternoon every week in the library, wandering my way through the latest journals. Which was will lingered after class, enjoying my first dorm lunch in a decade, if "enjoy" is the word.

"I'm glad the kids like it," I muttered, stabbing at my sweet-and-sour os-

trich.
"Excited," he repeated. Then he hesitated, searching for the best words. Or

perhaps trying to avoid the best words.
"I've got two teams," I confessed. "With very different attitudes."

"I've heard that too," Mitch confessed.

"I've heard the "Oh, yeah?"

"Counselors give me feedback from the students. What's said during social groups, and in private." He looked speculatively at the ceiling. "Plus I see things for myself, of course. . . ."

It occurred to me that I had no idea how Mitch spent his day, or how the

counselors did their jobs. For me, the students existed inside those two classrooms, and beyond those doors, they faded into a ghostly, half-evolved landscape.

cape. "So what happens Monday?" Mitch inquired.

"Their worlds make first contact."

He clucked his tongue, "Sounds fascinating."

On a whim, I said, "There's one student . . . named Catheryn-"

"Catheryn Tate. Oh, sure!" He grinned as he told me, "She seems to adore her little aliens."

But she didn't adore her teacher, I thought.

"Is there a problem with Catheryn?"
I tried to think of a diplomatic way to admit, "I'm sick of her."

But before I spoke, Mitch was telling me, "You know, your class is doing

that young woman a world of good."
"That's nice," I said, ignoring his pun.

"A world of good," he repeated, his eyes staring a long ways past me.

The teams sat at opposite ends of the room, the gap self-imposed. "Today," I told them, "you'll try to make contact. And the emphasis is on the word 'try."

told them, "you'll try to make contact. And the emphasis is on the word 'try.'

An excited murmur passed through the Spawn.

"These are the rules," I warned everyone. "Your two worlds have no common language, and you don't own fancy universal translators. And I don't want to hear the word telepathy. . 'Understood?"

The quiggles groaned.

Catheryn mouthed the words, "Narrow minded."

Pepper Spray threw a hand into the air. "Do we know anything about each

other?"
"You're the brightest stars in each other's sky," I replied. "Cosmically speaking, you're next door neighbors."

In exasperation, one of the quiggles asked, "But how can we talk if we can't

understand each other?"

Taylor rolled his eyes, muttering, "With pictures, of course."
Then Pepper Spray was waving at the quiggles, shouting, "Hey, you!
Whatever you are! This is going to be a hell of a lot of fun!"

The quiggles settled on sending a single-frame image: Two blue parents

holding hands with a pair of relentlessly cute, deeply blue children.

I had to serve as censor as well as the mailman. Catheryn tried to slip a

Vulcan live-long-and-prosper hand sign into their message, trying to make me crazy. She also insisted on those goofy smiles, for all the good it did her. I delivered the quiggles' greeting, smiles and all, and the Spawn, remembering their ignorance, couldn't decide if those enormous teeth were friendly, or a threat, or for that matter, if they were even genuine teeth.

But that was the least of the Spawn's problems.

But that was the least of the opportunities.

By the time I arrived, the team had split into two factions. "We represent
the seven strongest families," Pepper Spray explained. She had two boys in
her faction and a message ready to send. "My own family's the biggest and
meanest. Naturally."

Her allies nodded amiably.

The other faction threw paper missiles and good-natured insults.

Pepper Spray's digital showed their second sun—the F-class monster suddenly going nova. Then it shifted views, showing their home world melting to slag. She explained, "We want to make contact so they'll invite us to come and colonize their world."

"And if they don't invite you?" I inquired.

A malicious look passed across their faces, and on the room's main screen, a Spawn appeared, its mouth parts distended, ready to feed.

Catheryn stared at the exploding sun, then sighed heavily, announcing, "They want to destroy us."

"It may not mean that," said Taylor, giving me a hopeful glance.

"But what if it does?" she asked.

They were assuming that the exploding sun was theirs. It was an unwarranted, bizarre interpretation, and it was paranoid, and I didn't give Catheryn any reason to doubt herself.

Instead, I simply punched up the second faction's message.

It was much like the first message, except its authors had been more thorough, including the Spawn's primary sun.

ugh, including the Spawn's primary sun.
"Seel" said Taylor. "They're talking about their own solar system. . . !"

"But why send two messages?" Catheryn asked. She glanced at me, then thought better of it. "This doesn't make sense."

"We've got our next message ready," Taylor told me.

It was a digital showing several minutes of Eden: A lush golden landscape populated with vegetarian species, including the peace-loving quiggles, the scene framed by the bright arc of the world's rings.

But Catheryn had second thoughts.

Building the Building of the World

"We shouldn't tell them too much about ourselves," she announced, "At least until we know more."

There were nods and worried sighs.

Then one of the other girls remarked, "Maybe we should be building an

Green eyes sliced her in two. Then Catheryn turned those eyes on me, held her lumpy guiggle close, and announced, "We aren't sending anything now," A powerful message in its own right:

Silanca

The quiggles were bombarded with images of shrinking oceans, droughtravaged lands, and millions of Spawn standing in neat military rows. Then just before class ended. Pepper Spray sent a more sophisticated message: The Three-Families were friends to the quiggles, and the Four-Families were their mortal enemies. To prove it, she showed a foursome of Spawn cooking quiggles over explosive fires while three others helped living quiggles fight their common foes

Catheryn was sick of the game. "We aren't going to talk to them anymore," she decided, speaking for everyone,

Disappointed, Taylor pointed out, "But we've still got four sessions left." "Nothing," she threatened. Then she shot me with a glance, adding, "Is

that all right with you?" "If you want to be xenophobes," I told them, "that's your right,"

But that next morning, I told the Spawn, "We're moving to the next stage,

Build starships and pay your neighbors a visit.

"Except we've got three factions now," said Pepper Spray. Sure enough, they were sitting in three groups. She held hands with one boy, while her former ally had joined up with someone from the Four Families. And he didn't look very happy, his face dark and twisted . . . and not be-

cause he was pretending to be a Spawn. . .

Big things had happened after vesterday's session. Suddenly I remembered being sixteen, feeling the scars of being rebuked in love.

For the rest of that morning, the factions built digital starships capable of carrying thousands of digital Spawn for all of fifty feet. And meanwhile, the quiggles distracted themselves by inventing an elaborate religion centered on their perfect world. They worked with diligence and some imagination, inventing rituals right up to the instant when three vast starships entered their digital realm, dropping into low orbits, and with the concentration of eagles, studying the lay of the nearly empty lands.

Even then, Catheryn tried to convince her teammates to ignore the invaders.

But Pepper Spray, handling her own ship's controls from the other classroom, decided to engulf the quiggles' rings.

"For fuel," she explained to me, "And to deliver a point,"

I couldn't help but wink and smile at her. Then I returned to the other classroom, finding it empty. Catheryn had excused her team early. On the main monitor, quiggles were bouncing beneath a ringless sky, acting as if nothing at all were wrong.

"Have a minute, Frank?" "Barely," I said.

Mitch offered a grim smile, then said, "It's about two of your students." He

named them, then explained, "They had a fight yesterday. An out-and-out brawl."

He was talking about Pepper Spray's suitors, I realized. "Both ended up at the clinic," he reported. "Nothing life threatening, thank

goodness. But it gave everyone quite the scare." "It was about a girl." I offered.

"Regardless." He looked at his fingernails, then me. "I just wanted to warn you. Both of those young men have been expelled."

The Spawn were down to five on their team.

Mitch shook his head in disgust. "Right in the middle of their social group. Without warning. They just exploded!"

Like the Spawn would, but I decided not to mention it.

Acting like devout Machiavellians, the Spawn had realigned themselves even before I arrived-the Two Families and Three Families. And so that their opponents couldn't gain an advantage, Pepper Spray and her new partner destroyed the abandoned starship, chunks of debris plummeting to the digital world below.

The only questions left were when would the Spawn invade, and how

would they divide their spoils before they turned on each other. The quiggles refused even to try contacting the starships.

Instead, they gathered their people-all ten thousand-at a holy place. Looking across the Green Sea, parents and children knelt as one, and in a language of musical chords, they began to sing for salvation. They sang to their god to save Quiggle. They sang for their enemies to be turned away.

From orbit, the Spawn could see everything.

I took Catheryn aside. Twice.

The first time, I argued that diplomacy might be best. A digital face-to-face could solve the problems, or at least delay them.

She shrugged, then told me, "Maybe," with no intention of doing it. When I pulled her away the second time, the Spawn had drawn up their battle plan. They wouldn't annihilate the quiggles, since the natives were

scarce and unarmed. But the Spawn would divide their world into five equal slices, then build small cities, sealed and blessed with high-oxygen atmospheres. Then their starships would begin ferrying millions of colonists to their new home.

"This is the oldest conundrum," I warned Catheryn, "Hawks versus doves." She stared at me for a long moment.

Her eyes were sunken. Exhausted. I realized that not only hadn't she slept in days, but she had done nothing but work on her nonexistent world.

"In Nature," I warned, "it's the mixture of hawk and dove that prospers. Everything has to fight sometime. And nothing can afford to be vicious all

the time" A weak little smile showed itself.

Then with a diplomat's care, she said, "The quiggles have to remain quiggles. Aren't those the rules?" Generally, yes.

And the smile grew, reminding me that Catheryn was a rather pretty girl, and I was, by contrast, a very old man.

The five cities were built by the end of the session. Then the starships

turned and left for home, scheduled to return tomorrow morning.

They were never seen again.

I came to class early, but the guiggles were already there. Like the digital quiggles on the monitors, they were sitting on the floor with legs crossed, the seven of them chanting in their best renditions of quiggle-speak, begging their god to produce a miracle. If it hadn't been such an earnest show, I might have laughed. Pepper Spray did laugh. She was passing by, and when she saw them, she cackled and called to the others. "Look what the stupid blue people are doing!" she called out. "Come look!"

I've got to hand it to Catheryn, she had her team ready for the jocular ahuse.

Taylor and the others remained seated and focused, repeating the same nonsensical phrases. Then suddenly and without warning, the brightest star in the sky became much, much brighter. The Spawn's aging sun had exploded prematurely. Which of course it shouldn't have done. Not unless someone very clever had slipped into the Spawn's files and rewritten the commands.

Had Catheryn done that? Glancing at the quiggles, I saw their leader leaning to one side, kissing the

quiet boy on his ear. Just once, and lightly,

A wide, infatuated smile covered Taylor's face. He was a sixteen-year-old boy, and he thought he was in love. For a kiss on the ear, he had gladly, even joyfully killed billions. . . .

"You know," Mitch began, "I hate having to get involved. Our policy is one of giving our teachers as much freedom as possible. But this class of yours . . . how can I say this. . . ? It's getting more than a little out of hand."

I agreed with him, but I wouldn't admit it. Instead I leaned forward in my chair, looking Mitch in the eyes. "These

kids feel an enormous stake in their worlds. That's what this means. "No," he said. "It means that I have another student visiting our overworked clinic, this one with a bloody lip . . . and our staff is making arrangements for a third student, a young woman with a sterling school record, to go home early, in disgrace."

Catheryn was in the clinic. I wasn't sure when she was struck, or if anyone had actually hit her. There was a lot of shouting after the sun exploded, and Pepper Spray stepped up to Catheryn with the intent of pushing her off her feet. But I grabbed the angry girl, dragging her out of the classroom while trying to defuse her temper. It was after that that Catheryn's lip got bloodied. I was in the hallway with Pepper Spray, talking quietly, trying to rationally deal with our mutual nemesis, and Taylor came out looking for me, reporting with a mixture of horror and glee that his new girlfriend had been attacked.

The quiggles agreed on the culprit: It was the quiet girl who had made the digital portraving war between two Spawn families.

The Spawn had a different story. Or stories. I had the impression that whatever happened, it happened when none of them were paving close attention.

Mitch looked at the far corner of his office, "So what's your class situation now . . . if you don't mind telling me. . . ?"

"The Spawn's home world is dead. Nothing remains but their five colonies on Quiggle. Which will be four colonies starting tomorrow." I paused, then said, "But those four cities have a larger population than the natives, and many times the technology. Plus, they're unified now, For the first time,"

He nodded, then asked in an off-handed way, "Is this what we should be teaching? How to commit genocide?" Genocide was an inadequate, almost lukewarm word, but I didn't get my

chance to tell him so.

"By the way," he mentioned. "Do you happen to have a list of the social groups handy? I think it came with your teacher's packet—"

I found the right list, then asked, "Why?"

"Those two boys who fought the other night . . . do you happen to notice who else was in that social group. . . ?"

Catheryn Tate. Mitch nodded, adding, "There's a detail that I didn't know until now. Their counselor claims that Catheryn was talking to one of the boys, whispering to

him, just before the fight began."

I kept staring at her name, feeling a tightness in my chest.
"Mr. Salo," he said, steering clear of my first name. "Tm going to have my
eyes on you from here on. Just to make sure things go well."

I'm too old to be ordered around like a sophomore, and too stubborn for

anyone's good, including my own.

The Spawn—what was left of them—arrived early to finalize their battle plans. I was waiting for them. With a wild-eyed delight, Pepper Spray described the coming war with the quiggles, and what she would do to them...

and I interrupted her with a simple question:
"What if you can't find them?"

She hesitated, anger flickering into a sudden uncertainty.

"They're not just scarce," I warned. "They've got an entire world to hide on, and you've only got two days left to play this game."

And it was a game, I reminded myself.

"So what should we do?" she asked.
"You're living inside sealed environments," I reminded them. "You can re-

main there, if you want. Safe as safe can be."
"And?" asked one of her cohorts.

"How would the Spawn act?" I asked. Then I told them, "Be imaginative."

"We'll change the world around us," Pepper Spray blurted.

"Change it how?" another asked. She was laughing, winking at me as she said, "This quiggle place needs to

be more like home, of course."

"We make it into Hell."

At my insistence, the Spawn delayed their final assault.

Tomorrow would be soon enough, I argued. And besides, it would take them only a few minutes to twist the world's climate into a useful furnace, erasing one biosphere to leave room for theirs.

I decided to make Thursday my library day, as it happened. Armed with a diet platter, I sat at a small table, trying to read my e-mail but mostly looking across the large room, watching seven resolute people, one with a bandaged lip and a felt quiggle, sitting at a round table, holding hands while they detailed a series of the series of

chanted some odd quiggle prayer.

I felt a pang of admiration for Catheryn, for her charisma and determination . . . or maybe that's the way I want to remember it, and I didn't think anything of the kind. . . .

One of the quiggles noticed me, rose and came over.

"Mr. Salo?"
"Hello, Taylor."

The quiet boy smiled shyly, then said, "I just wanted to tell you. I've enjoyed the class, even if it's been kind of stressful at times—"

"Thank you."

"We've all gotten a lot out of the work."

I nodded, then mentioned, "The quiggles are very important to—" Your girlfriend, I nearly said. "To Catheryn, Aren't they?"

He nodded, a light filling his eyes. 'I know she can be different, and difficult... but coming from a background like hers... well, I guess she's pretty lucky just to be here, and to be able to have this opportunity..."

In an offhanded way. I asked:

"What do you mean? What about her background?"

Taylor looked at me with a genuine surprise. Then he gathered himself, saying, 'Didn't you know? Three years ago. It was a big news story. Her father had some kind of mental breakdown. In the middle of the night, the shot Catheryn and her two sisters, then shot their mother. Then he killed himself.

Catheryn's the only one who survived."

I didn't say a word, but the family name—Tate—rang a few ominous bells.

Taylor was ready to melt, he was so embarrassed. "She's never said, but I think that's why she likes her aliens so much. Why she needs them. Quiggles are harmless. They'll never but each other. Or hurt anything else, for the same than the same of the same

matter."

I was stunned. Hammer-to-the-back-of-the-head stunned. All I could think

to say was, "Your girlfriend's good at making others turn violent." He gave a big sigh, saying, "You've got to see things like she does. If a person is going to play god, then it's her duty to protect her creations. To keep

them pure."

I looked across the room, watching that girl as if for the first time.
"To protect them," Taylor repeated. "Which is something no god, or anyone, ever did for her family ... by the way..."

Where one might expect to find carbonate rock, the Spawn planted thousand megaton nukes. Then because they were very proud of their achievement, they poge-hopped into the quiggles' room to announce what the futurewas bringing. "Mushroom clouds and an enormous heat wave," Pepper Spray promised. "The carbon dioxide from all that cooked rock is going to cause a worldwide drought. Your stupid rivers won't run anymore. Your plants will dry up and die. And all of you, wherever you're hiding, you cowards, will grow narrower and narrower, and hungrier and hungrier. And ovu'll starve."

If the quiggles in the room were listening, they didn't show it. With hands linked, they kept their eyes closed, and with hoarse little voices, they begged for divine help.

"Die!" thundered Pepper Spray.

She gave a coded command.

Then on the main screen, and every other screen too, nothing happened.

From orbit and from ground level, not one little thing changed on that digital

world.

But I wasn't watching the screens. I was concentrating on Catheryn, how she kept her eyes and mouth closed tight, and how her hands shook right up until the instant when Taylor cried out, "We're still alive!"

The girl tried to open her eyes, then lost her courage.

"Look!" Taylor implored. "Go on! Look!"

Then Catheryn took a deep breath, finding enough poise to lift her head, ignoring the screens and the Spawn, looking instead at the smiling face of God.

My smiling face.

"Runaway fusion reactions won't work on Quiggle," I explained. "Suppression fields are being generated by buried machinery—machinery built by the original inhabitants—whose purpose is to make those sorts of weapons useless."

Expressions ranged from thrilled to mortified.

Expressions ranged from timed to mortified, and the story that I'd invented last night, explaining the quiggles' world, and when inspiration took hold of me, I added a few sweat-spurred details just to prove to myself that I could do it.

Quiggle was once inhabited by an advanced species, brutal and short-

lived.

The present pacifists had evolved from a few peaceful survivors, and

their world was immersed in an array of muscular suppression fields. If the Spawn wanted to remain on that planet—and it didn't look as if they had any choice—they first would have to learn the ins and outs of being decent neighbors, cooperating with the natives, and so forth, . . .

It was a contrived, utterly unanticipated explanation, and nothing quite

like it would ever happen in the genuine universe.

But then again, it was only a story.

Once the quiggles and Spawn had hammered out a peace plan, I thanked everyone, then dismissed them.

Mitch was waiting in ambush. Ushering me to his office, we examined the students' evaluations, and his own. He pointed out to me that I never seemed concerned about my kids as people. Because he was right, I grew furious. I responded with a few well-aimed attacks about the state of sience deucation and the appropriate boundaries of imagination. We moved not insults about the size of respective brains and guts and perhaps another organ or two, and then I had enough, storming out of his office, down the hall and down the stairs and finding myself suddenly outdoors.

Catheryn and Taylor were sitting in the benign sunshine, holding hands,

the felt-and-pillow quiggle standing between Catheryn's feet.

I strode past them, then paused.

Like any boy in love, Taylor was beaming. The quiggle wore an equally imbecilic grin. While Catheryn's smile was wary. And in its fashion, wise. "So," she asked with a painstaking indifference, "are you going to teach again next summer?"

"Maybe somewhere," I said, struggling to sound hopeful.

The youngsters nodded in a distant way, shrugged their shoulders, then happily returned to their intimate whispers.
And that's when I finally realized how much I truly, truly despise all chil-

dren.

Catheryn—and the Quiggles—had won. I had lost, and wouldn't be coming back.

And I wondered, with a sudden chill that turned the afternoon cold, which group had really been the most ruthless after all...O

EATING THE MYSTERY

by Robert Frazier and James Patrick Kelly

"We've eaten the mystery as fast as it has been presented us." Norman Mailer on the Apollo missions

A hundred years ago,

Christmas 1968,

three men in a glorified tub circled our moon for the first time.

The moon is essentially gray, no color, says Lovell,

as he passes the memorized landmarks grooved by ancient rills.

Here are the lifelines of Creation, a virgin palm for the reading.

Now the moon is a motley fool, its innocence lost in

wheat gold and lake blue.

Dark mine tailings and bright scrap piles frame our dewdrop domes.

We can see the long parallel faults of Gaudibert, and a run through the mare material right into the highlands,

says Anders

as he skims above a wasteland formed before men, before grass.

There's a zoo at Hadley

with a kangaroo and Komodo dragon. We're saving for a killer whale.

The disney at Nubium has a Christmas parade where the angels actually fly.

It's a vast, lonely, forbidding sight, says Borman, who is sick, as he surveys the surface of the rolling holy sea that he will never see again. Water that can be walked upon only by saints and lunatics.

We are fourteen million now.
We make scented oxygen and foam ceramics,
black cheese and luna.com.

Our telescopes peer beyond the far edge of Heaven.

Anders begins,
And Earth was without form,
and void; and darkness
was upon the face of the deep . . .
Borman ends,
And God saw it was good.
The evening closes for Houston and

The evening closes for Houston and Christmas day is but an hour in orbit, a sacred hour out of radio contact.

If their rocket misfires,

if hydrazine fails to abhor nitrogen tetroxide, the unthinkable disaster.

Then from the static of 231,000 miles, like a sermon from crackling fire,

there is a Santa Claus.
Lovell makes everyone laugh.

We get all Earth types at Christmas: grandpas, girl scouts, the genderlost. We're handicapped-friendly;

MasterCard and Visa accepted.

They come for the sunrise
that spreads like a neon fan.

solar outgassing, a visible wind. But when the crowds go home,

what remains will always remain,
just an incantation of rays
off the lip of the lunar horizon.





GRIST

"Grist" was inspired by the image of the inner planets all connected together by a physical webwork of gigantic cables. The author then thought of them wrecked "like a broom to cobweb—and all of a sud-

den there was this great solar-systemwide civil war in my head. This story is about the start of that war." A twovolume, multi-viewpoint saga of the battle between the inner and outer solar system has just been sold to HarperPrism.



"Things that really matter, although they are not defined for all eternity, even when they come very late still come at the right time."

-Martin Heidegger, "Letter on Humanism"

Midnight Standard at the Westway Diner

tanding over all creation, a doubt-ridden priest took a piss. He shook himself, looked between his feet at the stars, then tabbed his pants closed. He flushed the toilet and centrifugal force took care of the

Andre Sud walked back to his table in the Westway Diner, He padded over the living fire of the plenum, the abyss-all of it-and hardly noticed. Even though this place was special to him, it was really just another café with a see-through floor-a window as thin as paper and as hard as diamond. Dime a dozen as they used to say a thousand years ago. The luciferan sign at the entrance said FREE DELIVERY. The sign under it said OPEN 24 HRS. This sign was unlit. The place will close, eventually.

The priest sat down and stirred his black tea. He read the sign, backward, and wondered if the words he spoke when he spoke, sounded anything like

English used to. Hard to tell with the grist patch in his head. Everybody understands one another on a general level, Andre Sud

thought. Approximately more or less, they know what you mean, There was a dull, greasy gleam to the napkin holder. The salt shaker was half-full. The laminated surface of the table was worn through where the plates

usually sat. The particle board underneath was soggy. There was free-floating grist that sparkled like mica within the wood; used-to-be-cleaning-grist, entirely shorn from the restaurant's controlling algorithm and nothing to do but shine. Like the enlightened pilgrim of the Greentree Way. Shorn and brilliant.

And what will you have with that hamburger?

Grist. Nada v grist. Grist v nada.

I am going through a depression, Andre reminded himself. I am even considering leaving the priesthood.

Andre's pellicle—the microscopic, algorithmic part of him that was spread out in the general vicinity-spoke as if from a long way off.

This happens every winter, And lately with the insomnia, Cut it out with

the nada y nada. Everything's physical, don't you know.

Except for you, Andre thought back. He usually thought of his pellicle as a little cloud of algebra symbols that followed him around like mosquitoes. In actuality, it was normally invisible, of course.

Except for us, the pellicle replied.

All right then. As far as we go. Play a song or something, would you?

After a moment, an oboe piped up in his inner ear. It was an old Greentree hymn—"Ponder Nothing"—that his mother had hummed when he was a kid. Brought up in the faith. The pellicle filtered it through a couple of variations and inversions, but it was always soothing to hear.

There was a way to calculate how many winters the Earth-Mars Diaphany would get in an Earth year, but Andre never checked before he returned to the seminary on his annual retreat, and they always took him by surprise, the winters did. You wake up one day and the light has grown dim.

The café door slid open and Cardinal Filmbuff filled the doorway. He was

wide and possessive of the doorframe. He was a big man with a mane of silver hair. He was also space-adapted and white as bone in the face. He wore all black with a lapel pin in the shape of a tree. It was green, of course. "Father Andre," said Filmbuff from across the room. His voice sounded like

a Met cop's radio. "May I join you?"

Andre motioned to the seat across from him in the booth. Filmbuff walked

over with big steps and sat down hard. "Isn't it late for you to be out, Morton?" Andre said. He took a sip of his tea.

He'd left the bag in too long and it tasted twiggy. I was too long at the pissing, thought Andre.

"Tried to call you at the seminary retreat center," Filmbuff said.

"I'm usually here." Andre replied, "When I'm not there."

"Is this place still the seminary student hangout?"

"It is. Like a dog returneth to its own vomit, huh? Or somebody's vomit." A waiter drifted toward them. "Need menus?" he said. "I have to bring

them because the tables don't work.' "I might want a little something," Filmbuff replied. "Maybe a lhasi."

The waiter nodded and went away.

"They still have real people here?" said Filmbuff.

"I don't think they can afford to recoat the place."

Filmbuff gazed around. He was like a beacon, "Seems clean enough," "I suppose it is," said Andre. "I think the basic coating still works and that

just the complicated grist has broken down." "You like it here." Andre realized he'd been staring at the swirls in his tea and not making eve contact with his boss. He sat back, smiled at Filmbuff, "Since I came to seminary, Westway Diner has always been my home away from home." He

took a sip of tea. "This is where I got satori, you know." "So I've heard. It's rather legendary. You were eating a plate of mashed

potatoes."

"Sweet potatoes, actually. It was a vegetable plate. They give you three choices and I chose sweet potatoes, sweet potatoes, and sweet potatoes."

"I never cared for them." "That is merely an illusion. Everyone likes them sooner or later."

Filmbuff guffawed. His great head turned up toward the ceiling and his copper eyes flashed in the brown light. "Andre, we need you back teaching.

Or in research." "I lack faith

"Faith in yourself."

"It's the same thing as faith in general, as you well know."

churchmice and no good Broca grist to be had for Barrel wages.

"You are a very effective scholar and priest to be so racked with doubt. Makes me think I'm missing something.

"Doubt wouldn't go with your hair, Morton,"

The waiter came back. "Have you decided?" he said.

"A chocolate lhasi," Filmbuff replied firmly, "And some faith for Father Andre here."

The waiter stared for a moment, nonplused. His grist patch hadn't translated Cardinal Filmbuff's words, or had reproduced them as nonsense.

The waiter must be from out the Happy Garden Radial, Andre thought. Most of the help was in Seminary Barrel. There's a trade patois and a thousand long-shifted dialects out that way. Clan-networked LAPs poor as

"Iye ftip," Andre said to the waiter in the Happy Garden patois. "It is a joke." The waiter smiled uncertainly. "Another shot of hot water for my tea is what I want," Andre said. The waiter went away looking relieved. Filmbuff's aquiline presence could be intimidating.

"There is no empirical evidence that you lack faith." Filmbuff said. It was a pronouncement. "You are as good a priest as there is. We have excellent re-

norts from Triton."

Linsdale, Andre thought. Traveling monk, indeed. Traveling stool-pigeon was more like it. I'll give him hell next conclave.

"I'm happy there. I have a nice congregation, and I balance rocks."

"Yes. You are getting a reputation for that." "Triton has the best gravity for it in the solar system."

"I've seen some of your creations on the merci. They're beautiful."

"Thank you."

"What happens to them?" "Oh, they fall," said Andre, "when you stop paying attention to them,"

The chocolate lhasi came and the waiter set down a self-heating carafe of

water for Andre. Filmbuff took a long drag at the straw and finished up half his drink

"Excellent." He sat back, sighed, and burped. "Andre, I've had a vision." "Well, that's what you do for a living."

"I saw you."

"Was I eating at the Westway Diner?"

"You were falling through an infinite sea of stars." The carafe bubbled, and Andre poured some water into his cup before it became flat from all the air being boiled out. The hot water and lukewarm tea

mingled in thin rivulets. He did not stir.

"You came to rest in the branches of a great tree. Well, you crashed into it,

actually, and the branches caught you."

"Yeedrasil?" "I don't think so. This was a different tree. I've never seen it before. It is very disturbing because I thought there was only the One Tree. This tree was

just as big, though." "As big as the World Tree? The Greentree?"

"Just as big. But different." Filmbuff looked down at the stars beneath their feet, His eyes grew dark and flecked with silver. Space-adapted eyes always took on the color of what they beheld. "Andre, you have no idea how real this was. Is. This is difficult to explain. You know about my other visions, of the coming war?"

"The Burning of the One Tree?"

"Yes."

"It's famous in the Way."

"I don't care about that. Nobody else is listening. In any case, this vision has placed itself on top of those war visions. Right now, being here with you. this seems like a play to me. A staged play. You. Me. Even the war that's coming. It's all a play that is really about that damn Tree, And it won't let me

go." "What do you mean, won't let you go?"

Filmbuff raised his hands, palms up, to cradle an invisible sphere in front of him. He stared into this space as if it were the depths of all creation, and his eyes became set and focused far away. But not glazed over or unaware.

They were so alive and intense that it hurt to look at him. Filmbuff's phys-

ical face vibrated when he was in trance. It was a slight effect, and unnerving even when you were used to it. He was utterly focused, but you couldn't focus on him. There was too much of him there for the space provided. Or not enough of you.

I am watching chronological quantum transport in the raw, Andre thought. The instantaneous integration of positronic spin information from up-time sifted through the archetypical registers of Filmbuff's human brain.

And it all comes out as metaphor.

"The Tree is all burnt out now," Flimbuff said, speaking out of his trance. His words were like stones. "The Burning's done. But it isn't char that I'm seeing, no." He clenched his fists, then opened his palms again. "The old Tree is a shadow. The burnt remains of the One Tree are really only the shadow of the other tree, the new Tree. It's like a shadow the new Tree casts."

"Shadow," Andre heard himself whispering. His own hands were clenched

in a kind of sympathetic vibration with Filmbuff.

"We are living in the time of the shadow," said Filmbuff. He relaxed a bit.
"There's almost a perfect juxtaposition of the two trees. I've never felt so sure

of anything in my life."

Filmbuff, for all his histrionics, was not one to overstate his visions for effect. The man who sat across from Andre was only the aspect—the human
portion—of a vast collective of personalities. They were all unified by the central being; the man before him was no more a puppet than was his enthalpic
computing analog soaking up energy on Mercury, or the nodes of specialized
grist spread across human space decoding variations in anti-particle spins as
they made their way backward in time. But he was no longer simply the man
who had taught Andre's Intro to Pastoral Shamanism course at seminary.
Ten years ago, the Greentree Way had specifically carfed a large array of
personalities to catch a glimpse of the future, and Filmbuff had been assigned to be morphed.

I was on the team that designed him, Andre thought. Of course, that was back when I was a graduate assistant. Before I Walked on the Moon.

"The vision is what's real." Filmbuff put the lhasi straw to his mouth and finished the rest of it. Andre wondered where the liquid went inside the man. Didn't he run on batteries or something? "This is maya. Andre."

"I believe you, Morton."

"I talked to Erasmus Kelly about this," Filmbuff continued. "He took it on the merci to our Interpreter's Freespace."

"What did they come up with?"

Filmbuff pushed his empty glass toward Andre. "That there's a new Tree,"

he said.
"How the hell could there be a new Tree? The Tree is wired into our DNA

like sex and breathing. It may be sex and breathing."
"How should I know? There's a new Tree."

Andre took a sip of his tea. Just right. "So there's a new Tree," he said. What does that have to do with me?"

"We think it has to do with me?"

"What research? I balance rocks."

"From before."

"Before I lost my faith and became an itinerant priest?"

"You were doing brilliant work at the seminary."
"What? With the time towers? That was a dead end."

"You understand them better than anyone."

"Because I don't try to make any sense of them. Do you think this new Tree has to do with those things?"

"It's a possibility."

"I doubt it."

"You doubt everything."

"The time towers are a bunch of crotchety old LAPs who have disappeared up their own asses." "Andre, you know what I am."

"You're my boss."

"Besides that."

"You're a manifold. You are a Large Array of Personalities who was specially constructed as a quantum event detector-probably the best in human history. Parts of you stretch across the entire inner solar system, and you have cloud ship outriders. If you say you had a vision of me and this new

Tree, then it has to mean something. You're not making it up. Morton, you see into the future, and there I am." "There you are. You are the Way's expert on time. What do you think this

means? "What do you want me to tell you? That the new Tree is obviously a further

stage in sentient evolution, since the Greentree is us?" "That's what Erasmus Kelly and his people think, I need something more

subtle from you." "All right. It isn't the time towers that this has to do with."

"What then?" "You don't want to hear this."

"You'd better tell me anyway."

"Thaddeus Kaye."

"Thaddeus Kave is dead. He killed himself, Something was wrong with him, poor slob."

"I know you big LAPs like to think so."

"He was perverted. He killed himself over a woman, wasn't it?" "Come on, Morton, A pervert hurts other people, Kaye hurt himself."

"What does he have to do with anything, anyway?"

"What if he's not dead? What if he's just wounded and lost? You understand what kind of being he is, don't you, Morton?"

"He's a LAP, just like me."

"You only see the future, Morton, Thaddeus Kave can affect the future directly, from the past."

"So what? We all do that every day of our lives."

"This is not the same. Instantaneous control of instants. What the merced quantum effect does for space, Thaddeus Kaye can do for time. He prefigures the future. Backward and forward in time. He's like a rock that has been dropped into a lake."

"Are you saving he's God?"

"No. But if your vision is a true one, and I know that it is, then he could very well be the war."

"Do you mean the reason for the war?"

"Yes, but more than that. Think of it as a wave, Morton, If there's a crest, there has to be a trough. Thaddeus Kaye is the crest and the war is the trough. He's something like a physical principle. That's how his integration process was designed. Not a force, exactly, but he's been imprinted on a property of time."

"The Future Principle?"

"All right. Yes. In a way, he is the future. I think he's still alive." "And how do you know that?"

"I didn't until you told me your vision. What else could it be? Unless aliens are coming."

"Maybe aliens are coming. They'd have their own Tree. Possibly."

"Morton, do vou see aliens coming in your dreams?" "No."

"Well, then."

Filmbuff put his hands over his eyes and lowered his head, "I'll tell you what I still see," he said in a low rumble of a voice like far thunder. "I see the burning Greentree. I see it strung with a million bodies, each of them hung by the neck, and all of them burning, too. Until this vision, that was all I was seeing.

"Did you see any way to avoid it?"

Filmbuff looked up. His eyes were as white as his hands when he spoke. "Once. Not now. The quantum fluctuations have all collapsed down to one big macro reality. Maybe not today, maybe not tomorrow, but soon."

Andre sighed, I believe, he thought, I don't want to believe, but I do, It's easy to have faith in destruction.

"I just want to go back to Triton and balance rocks," he said, "That's really all that keeps me sane. I love that big old moon."

Filmbuff pushed his lhasi glass even farther away and slid out of the booth. He stood up with a creaking sound, like vinyl being stretched, "Interesting times," he spoke to the café. "Illusion or not, that was probably the last good

lhasi I'm going to have for quite a while." "Uh, Morton?"

"Yes. Father Andre?"

"You have to pay up front. They can't take it out of your account."

"Oh my." The cardinal reached down and slapped the black cloth covering his white legs. He, of course, had no pockets. "I don't think I have any money with me.

"Don't worry," Andre said. "T'll pick it up."

"Would you? I'd hate to have that poor waiter running after me down the street."

"Don't worry about it."

"We'll talk more tomorrow after meditation." This was not a request. "We'll talk more then."

"Good night, Andre."

"Night, Morton."

Filmbuff stalked away, his silver mane trailing behind him as if a wind were blowing through it. Or a solar flare.

Before he left the Westway, he turned, as Andre knew he would, and spoke one last question across the space of the diner.

"You knew Thaddeus Kaye, didn't you, Father Andre?" "I knew a man named Ben Kave. A long time ago," Andre said, but this

was only confirmation of what Filmbuff's spread-out mind had already told The door slid shut and the Cardinal went out into the night. Andre sipped at his tea

Eventually the waiter returned. "We close pretty soon," he said.

"Why do you close so early?" Andre asked.

"It is very late."

"I remember when this place never closed."

"I don't think so, It always closed."

"Not when I was a student at the seminary." "It closed then." said the waiter. He took a rag from his apron, activated it

with a twist, and began to wipe a nearby table.

"I'm sure vou're mistaken."

"They tell me there's never been a time when this place didn't close." "Who tells you?"

"People."

"And you believe them."

"Why should I believe you? You're people." The waiter looked up at Andre, puzzled. "That was a joke." he said. "I guess it does not translate."

Bring me some more tea and then I will go."

The waiter nodded, then went to get it.

There was music somewhere. Gentle oboe strains. Oh, ves. His pellicle was still playing the hymn.

What do you think?

I think we are going on a quest.

I suppose so.

Do you know where Thaddeus Kaye is?

No, but I have a pretty good idea how to find Ben. And wherever Ben is. Thaddeus Kave has to be.

Why not tell somebody else how to find him?

Because no one else will do what I do when I find him.

What's that?

Nothing. Oh.

When the back-up is done, we'll be on our way.

The third part of Andre's multiple personality, the convert, was off-line at the moment getting himself archived and debugged. That was mainly what the retreat was for, since using the Greentree data facilities was free to priests. Doing it on Triton would have cost as much as putting a new roof on his house.

Why don't they send someone who is stronger in faith than we are?

I don't know. Send an apostate to net an apostate, I guess.

What god is Thaddeus Kave apostate from? Himself.

And for that matter, what about us?

Same thing. Here comes the tea, Will you play that song again? It was Mother's favorite.

Do you think it could be that simple? That I became a priest because of that hymn?

Are you asking me?

Just play the music and let me drink my tea. I think the waiter wants us out of here.

"Do you mind if I mop up around you?" the waiter said.

"I'll be done soon."

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"Take your time, as long as you don't mind me working." "I don't mind."

Andre listened to mournful oboe and watched as the waiter sloshed water across the infinite universe, then took a mon to it with a vengeance,

Tony Daniel

Down in the dark there's a doe rat I'm after to kill. She's got thirteen babies and I'm going to bite them, bite them, bite them. I will bite them.

The mulch here smells of dank stupid rats all running running and there's nowhere farther to run, because this is it, this is the Carbuncle, and now I'm here and this is truly the end of all of it but a rat can't stand to know that and won't accept me until they have to believe me. Now they will believe me.

My whiskers against something soft. Old food? No, it's a dead buck; I scent his Y code, and the body is dead but the code keeps thumping and thumping.

This mulch won't let it drain out and it doesn't ever want to die. The Carbuncle's the end of the line, but this code doesn't know it or knows it and won't have it. I give it a poke and a bit of rot sticks to my nose and the grist tries to swarm me, but no I don't think so. I sniff out and send along my grist, jill ferret grist, and no rat code stands a

chance ever, ever. The zombie rat goes rigid when its tough, stringy codewho knows how old, how far-traveled, to finally die here at the End of Everywhere—that code scatters to nonsense in the pit of the ball of nothing my grist wraps it in. Then the grist flocks back to me and the zombie rat thumps no more. No more.

Sometimes having to kill everything is a bit of a distraction. I want that doe

and her littles really bad and I need to move on.

Down a hole and into a warren larder. Here there's pieces of meat and the stink of maggot sluice pooled in the bends between muscles and organs. But the rats have got the meat from Farmer Jan's Mulmyard, and it's not quite dead yet, got maggot resistant code, like the buck rat, but not smart enough to know it's dead, just mean code jaw-latched to a leg or a haunch and won't dissipate. Mean and won't die. But I am meaner still.

Oh. I smell her.

I'm coming mamma rat. Where are you going? There's no going anywhere

Bomi slinks into the larder and we touch noses. I smell blood on her. She's got a kill, a bachelor male, by the blood spoor on her. It's so warm and wet, Jill. Bomi's trembling and wound up tight. She's not

the smartest ferret. I love it, love it, and I'm going back to lie in it.

That's bad. Bad habit. I don't care. I killed it: it's mine.

You do what you want, but it's your man Bob's rat.

No it's mine. He feeds you, Bomi.

I don't care.

Go lay up then. Tmill

Without a by-your-leave, Bomi's gone back to her kill to lay up. I never do that. TB wouldn't like it, and besides, the killing's the thing, not the owning. Who wants an old dead rat to lie in when there's more to bite? Bomi told me where she'd be because she's covering for herself when she

doesn't show and Bob starts asking. Bomi's a stupid ferret and I'm glad she

doesn't belong to TB.

But me-down another hole, deeper, deeper still. It's half-filled in here. The doe rat thought she was hiding it, but she left the smell of her as sure as a serial number on a bone. I will bite you, mamma.

Then there's the dead end chamber I knew would be. Doe rat's last hope in all the world. Won't do her any good. But oh, she's big. She's tremendous. Maybe the biggest ever for me.

I am very, very happy.

Doe rat with the babies crowded behind her. Thirteen of them, I count by the squeaks. Sweet naked squeaks, Less than two weeks old, they are. Puss and meat. But I want mamma now. The doe sniffs me and screams like a bone breaking and she rears big as

me. Bigger.

I will bite you. Come and try, little iill.

I will kill you.

I ate a sack of money in the City Bank and they chased me and cut me to pieces and just left my tail, and-I grew another rat! What will you do to me. jill, that can be so bad? You'd better be afraid of me.

When I kill your babies, I will do it with one bite for each. I won't hurt them for long.

You won't kill my babies.

At her.

At her, because there isn't anything more to say, no more messages to pass back and forth through our grist and scents.

I go for a nipple and she's fast out of the way, but not fast enough and I have a nub of her flesh in my mouth. Blood let, I chew on her nipple tip.

Blood and mamma's milk She comes down on me and bites my back, her long incisors cut through my fur, my skin, like hook needles, and come out at another spot. She's heavy.

She gnaws at me and I can feel her teeth scraping against my backbone. I shake to get her off, and I do, but her teeth rip a gouge out of me.

Cut pretty bad, but she's off. I back up thinking that she's going to try to

swarm a copy, and I stretch out the grist and there it is, just like I thought, and I intercept it and I kill the thing before it can get to the mulm and reproduce and grow another rat. One rat this big is enough, enough for always. The doe senses that I've killed her outrider, and now she's more desperate.

This is all there is for you. This is oblivion and ruin and time to stop the scurry.

feet dig deep, deep.

This is where you'll die. She strikes at me again, but I dodge, and—before she can round on me—I snatch a baby rat. It's dead before it can squeal. I spit out its mangle of bones

and meat. But mama's not a dumb rat, no, not dumb at all, and does not fly into a rage over this. But I know she regards me with all the hate a rat can hate, though. If there were any light, I'd see her eyes glowing rancid yellow.

Come on, mama, before I get another baby. She goes for a foot and again I dodge, but she catches me in the chest. She

raises up, up, The packed dirt of the ceiling, wham, wham, and her incisors are hooked

around my breastbone, damn her, and it holds me to her mouth as fast as a barbed arrowpoint.

Shake and tear, and I've never known such pain, such delicious . . . I rake at her eyes with a front claw, dig into her belly with my feet. Dig. dig, and I can feel the skin parting, and the fatty underneath parting, and my

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Shakes me again and I can only smell my own blood and her spit and then sharp, small pains at my back. The baby rats. The baby rats are latching onto me, trying to help their

mother.

Nothing I can do. Nothing I can do but dig with my rear paws. Dig, dig. I am swimming in her guts. I can feel the give. I can feel the tear. Oh, yes.

Then my breastbone snaps and I fly lose of the doe's teeth. I land in the babies, and I'm stunned and they crawl over me and nip at my eyes and one of them shreds an ear, but the pain brings me to and I snap the one that bit my ear in half. I go for another, Across the warren cavern, the big doe shuffles, I pull myself up, try to stand on all fours. Can't.

Baby nips my hind leg. I turn and kill it, Turn back, My front legs collapse. I cannot stand to face the doe, and I hear her coming.

Will I die here?

Oh, this is how I want it! Took the biggest rat in the history of the Met to kill me. Ate a whole bag of money, she did.

She's coming for me, I can hear her coming for me, She's so big, I can smell how big she is.

I gather my hind legs beneath me, find a purchase.

This is how I die. I will bite you.

But there's no answer from her, only the doe's harsh breathing. The dirt smells of our blood. Dead baby rats all around me.

I am very, very happy.

With a scream, the doe charges me. I wait a moment, Wait,

shredded belly. I bite! I bite! I bite!

I pounce, shoot low like an arrow.

I'm through, between her legs. I'm under her. I rise up. I rise up into her

Her whole weight keeps her down on me. I chew. I claw. I smell her heart. I smell the new blood of her heart! I can hear it! I can smell it! I chew and claw my way to it.

I bite.

Oh yes.

The doe begins to kick and scream, to kick and scream, and, as she does, the blood of heart pumps from her and over me, smears over me until my coat is soaked with it, until all the dark world is blood.

After a long time, the doe rat dies. I send out the grist, feebly, but there are no outriders to face, no tries at escape now. She put all that she had into fighting me. She put everything into our battle.

I pull myself out from under the rat. In the corner, I hear the scuffles of the babies. Now that the mamma is dead, they are confused.

I have to bite them. I have to kill them all. I cannot use my front legs, but I can use my back. I push myself toward them, my belly on the dirt like a snake. I find them all huddled in the far-

thest corner, piling on one another in their fright. Nowhere to go. I do what I told the doe I would do. I kill them each with one bite, counting

as I go. Three and ten makes thirteen.

And then it's done and they're all dead. I've killed them all.

There's only one way out: the way I came. That's where I go, slinking, crawling, turning this way and that to keep my exposed bone from catching on pebbles and roots. After a while, I start to feel the pain that was staying away while I fought. It's never been this bad.

I crawl and crawl, I don't know for how long. If I were to meet another rat, that rat would kill me. But either they're dead or they're scared, and I don't hear or smell any. I crawl to what I think is up, what I hope is up.

And after forever, after so long that all the blood on my coat is dried and

And after forever, after so long that all the blood on my coat is dried and starting to flake off like tiny brown leaves, I poke my head out into the air.

TB is there. He's waited for me.

Gently, gently he pulls me out of the rat hole. Careful, careful he puts me in my sack.

"Jill, I will fix you," he says.

I know.

"That must have been the Great Mother of rats."

She was big, so big and mean. She was brave and smart and strong. It was wonderful.

"What did you do?"

I bit her.

"I'll never see your like again, Jill."

I killed her, and then I killed all her children.

"Let's go home, Jill."

Yes, Back home.

Already in the dim burlap of the sack, and I hear the call of TB's grist to go to sleep, to get better, and I sigh and curl as best I can into a ball and I am falling away, falling away to dreams where I run along a trail of spattered blood, and the spoor is fresh and I'm chasing rats, and TB is with me close by, and I will bliet a rats soon. soon—

A Simple Room with Good Light

Come back, Andre Sud. Your mind is wandering and now you have to concentrate. Faster now. Fast as you can go. Spacetime. Clumps of galaxy clusters. Average cluster. Two-armed spiral.

Yellow star.

Here's a network of hawsers cabling the inner planets together. Artifact of sentience, some say. Mercury, Venus, Earth, Mars hung with a shining webwark across blank space and spreading even into the asteroids. Fifty-mile-thick cables bending down from the heavens, coming in at the poles to fit into enormous universal joints intricated by the living magnar of the planets' viscera. Torque and undulation. Faster. Somewhere on a flagellating curve between Earth and Mars, the Diaphany, you will find yourself. Closer in. Spinning spherule like a hundred—mile-long head on a million—mile-long necklace.

Come as close as you can.
All along the Mars-Earth Diaphany, Andre saw the preparations for a war like none before. It seemed the entire Met—all the interplanetary cables—had been transformed into a dense fortress that people just happened to live inside. His pod was repeatedly delayed in the pithway as troops went about their movements, and military grist swarmed hither and yon about some task or another. We live in this all-night along the carbon of the cables, Ande thought, within the dark glistening of the corridors where surface speaks to surface in tiny whispers like fingers, and the larger codes, the extirpated selections of a billion minds, clack together in a cemetery of logic, shaking hands, continually shaking bony, algorithmic hands and observing strict and necessary rotroool for the purposes of destruction.

Amés-he only went by the one name, as if it were a title-was a great one for martial appearances. Napoleon come again, the merci reporters said as a friendly joke. Oh, the reporters were eating this up. There hadn't been a good war in centuries. People got tired of unremitting democracy, didn't they? He'd actually heard somebody say that on the merci. How fun it will be to watch billions die for a little excitement on the merci.

Andre thought.

He arrived in Connacht Bolsa in a foul mood, but when he stepped out of his pod, there was the smell of new rain. He had walked a ways from the pod station before he realized what the smell was. There were puddles of water on the ground from the old fashioned street cleaning mechanism Connacht employed. It was still raining in spots—a small rain that fell only an inch or so from the ground. Little clouds scudded along the street like a miniature storm front, washing it clean of the night's leavings.

Connacht was a suburb radial off Phobos City, the most densely populated segment on the Met. A hundred years ago in the Phobos boom time. Connacht had been the weekend escape for intellectuals, artists, moneyed drug addicts-and the often indistinguishable variety of con-men, mountebanks. and psychic quacksalvers who were their hangers-on. The place was rundown now, and Andre's pellicle encountered various swarms of nostalgia that passed through the streets like rat packs-only these were bred and fed by the merchants to attract the steady trickle of tourists with pellicular receptors for a lost bohemia.

All they did for Andre was make him think about Molly.

Andre's convert—the electronic portion of himself—obliged him by dredging up various scenes from his days at seminary. The convert was usually silent, preferring to communicate in suggestive patterns of data-like a conscience gifted with irreducible logic and an infallible memory.

Andre walked along looking at the clouds under his feet, and as he walked his convert projected images into the shape of these clouds, and into the shift

and sparkle of the puddled water they left behind.

I have a very sneaky conscience. Andre thought, but he let the images continue.

-Molly Index, Ben Kaye, and Andre at the Westway, in one of their long arguments over aesthetics when they were collaborating on their preliminary thesis. "Knowing, Watching, and Doing: The Triune Aspect of Enlighten-

ment ' "I want to be 'Doing!" Molly mocked-yelled and threw a wadded up piece of paper at Ben.

He caught it, spread it out, and folded it into a paper airplane. "This is the way things have to be," he said. "I'm 'Doing.' You're 'Watching.' And we both know who 'Knowing' must be." They turned to Andre and smiled vulture smiles

"I don't know what you think I know, but I don't know it," he said, then

nearly got an airplane in the eye.

---Molly's twenty-four-year-old body covered with red Martian sand under the Tharsis beach boardwalk. Her blue eyes open to the sky pink sky. Her nipples like dark stones. Ben a hundred feet away, rising from the gray-green lake water, shaking the spume from his body. Of course he had run and iumped into the lake as soon as they got there. Ben wouldn't wait for anything.

But Molly chose me, I can't believe she chose me,

Because I waited for her and dragged her under the boardwalk and kissed her before I could talk myself out of it.

Because I waited for the right moment.

How's that for Doing?

 Living together as grad students while Molly studied art and he entered into the stations of advanced meditation at seminary.

—Molly leaving him because she would not marry a priest.

You're going to kill yourself on the moon.

Only this body. I'll get a new one. It's being grown right now. It isn't right.

This is the Greentree Way. That's what makes a priest into a true shaman.

He knows what it's like to die and come back. If you Walk on the Moon, you will know what it's like to lose a lover.

Molly, the Walk is what I've been preparing for these last seven years. You

know that.

I can't bear it. I won't. Maybe he could have changed her mind. Maybe he could have convinced her. But Alethea Nightshade had come along and that was that. When he'd

come back from the moon reinstantiated in his cloned body, Molly had taken a new lover. -His peace offering returned with the words of the old folk song, turned

inside out: "Useless the flowers that you give, after the soul is gone. -Sitting at a bare table under a bare light, listening to those words, over and over, and deciding never to see her again. Fifteen years ago, as they

measure time on Earth.

Thank you, that will be enough, he told the convert. An image of a stately butler, bowing, flashed through Andre's mind. Then doves rising from brush into sunset. The water puddles were just water puddles once again, and the tiny clouds were only clouds of a storm whose only purpose was to make the world a little cleaner.

Molly was painting a Jackson Pollock when Andre arrived at her studio. His heavy boots, good for keeping him in place in Triton's gravity, noisily clumped on the wooden stairs to Molly's second floor loft. Connacht was spun to Earth-normal. He would have knocked, but the studio door was already open.

"I couldn't believe it until I'd seen it with my own eyes," Molly said. She did not stop the work at her easel. "My seminary lover come back to haunt me." "Boo," Andre said. He entered the space. Connacht, like many of the old rotating simple cylinders on the Diaphany, had a biofusion lamp running down

its pith that was sheathed on an Earth-day schedule. Now it was day, and Molly's skylights let in the white light and its clean shadows. Huge picture windows looked out on the village. The light reminded Andre of light on the moon. The unyielding, stark, redeeming light just before his old body joined the others in the shamans' Valley of the Bones. "Saw a man walking a dog the other day with the legs cut off," said Molly,

She dipped the tip of her brush in a blue smear on her palette.

"The man or the dog?"

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"Maybe the day." Molly touched the blue to the canvas before her. It was like old times. "What are you painting?"

"Something very old."

"That looks like a Pollock."

"It is. It's been out of circulation for a while and somebody used it for a tablecloth, Maybe a kitchen table, I'm thinking."

Andre looked over the canvas. It was clamped down on a big board as long as he was tall. Sections of it were fine, but others looked as if a baby had spilled its mashed peas all over it. Then again, maybe that was Pollock's

work after all.

"How can you possibly know how to put back all that spatter?"

"How can you possibly know how to put back all that spatter."
"There're pictures." Molly pointed the wooden tip of her brush to the left hand corner of the canvas. Her movements were precise. They had always been definite and precise. "Mae, you can kind of see the tracery of where this section was before it get... whatever that is that got spilled on it there. Also,

I use grist for the small stuff. Did you want to talk about Ben?"
"I do."

"Figured you didn't come back to relive old times."

"They were good. Do you still do that thing with the mirror?"
"Oh, yes, Are you a celibate priest these days?"

"No, I'm not that kind of priest."

"I'm afraid I forgot most of what I knew about religion."

"So did I."

"Andre, what do you want to know about Ben?" Molly set the handle of her brush against her color palette and tapped it twice. Something in the two surfaces recognized one another, and the brush stuck there. A telltale glimer of grist swarmed over the brush, keeping it moist and ready for use Molly sat in a chair by her picture window and Andre sat in a chair across from her. There was a small table between them. "Zen tea?" she said.

"Sure," Andre replied.

The table pulsed, and two cups began forming on its surface. As the outsides hardened, a gel at their center thinned down to liquid.

"Nice table. I guess you're doing all right for yourself, Molly."

"I like to make being in the studio as simple as possible so I can concentrate on my work. I indulge in a few luxuries."

"You ever paint for yourself anymore? Your own work, I mean?"

Molly reached for her tea, took a sip and motioned with her cup at the Pollock.

"I paint those for myself," she said. "It's my little secret. I make them mine. Or they make me theirs."

"That's a fine secret."

"Now you're in on it. So was Ben. Or Thaddeus, I should say."

"You were on the team that made him, weren't you?"

"Aesthetic consultant. Ben convinced them to bring me on. He told me to think of it as a grant for the arts."

"I kind of lost track of you both after I . . . graduated."

"You were busy with your new duties. I was busy. Everybody was busy."
"I wasn't that busy."

"Ben kept up with your work. It was part of what made him decide to . . . do

"I didn't know that."

"Now you do. He read that paper you wrote on temporal propagation. The one that was such a big deal."
"It was the last thing I ever wrote."

"Developed a queer fascination with rocks?"

Grist

"You heard about that?"

"Who do you think sent those merci reporters after you?" "Molly, you didn't?"

"I waited until I thought you were doing your best work."

"How did you see me. . . ?" He looked into her eyes, and he saw it. The tell-

tale expression. Far and away. "You're a LAP." Molly placed the cup to her lips and sipped a precise amount of tea. "I guess you'd classify me as a manifold by now. I keep replicating and replicating. It's an art project I started several years ago. Alethea convinced me to do

it when we were together." "Will you tell me about her? She haunted me for years, you know. I pic-

tured her as some kind of femme fatale from a noir. Destroyed all my dreams by taking you."

"Nobody took me. I went. Sometimes I wonder what I was thinking. Alethea Nightshade was no picnic, let me tell you. She had the first of her breakdowns when we were together."

"Breakdowns?"

"She had schizophrenia in her genes. She wanted to be a LAP, but wasn't allowed because of it. The medical grist controlled her condition most of the time, but every once in a while . . . she outthought it. She was too smart for her own good."

"Is that why you became a LAP?" Andrew asked. "Because she couldn't?" "I told myself I was doing it for me, but yes. Then. Now, things are different." Molly smiled, and the light in the studio was just right. Andre saw the

edge of the multiplicity in her eyes.

The fractal in the aspect's iris. "You have no idea how beautiful it is-what I can see!" Molly laughed, and

Andre shuddered. Awe or fright? He didn't know. "She was just a woman," Molly said. "I think she came from around Jupiter, A moon or something, you know," Molly made a sweeping motion toward her window. As with many inner system denizens, the outer system was a great unknown, and all the same, to her. "She grew up on some odd

kind of farm." "A Callisto free grange?"

"I'm sure I don't know. She didn't talk about it much."

"What was she like?"

"Difficult "

"What do you mean?"

"I'll tell you." Tea sip. Andre realized he hadn't picked his up yet. He did so, tried it. It was wonderful, and all grist. A bit creepy to think about drinking it down.

I'll take care of it, don't you worry, said his pellicle.

I know you will.

"Alethea had two qualities that should never exist within one organic mind. A big intellect and a big heart. She felt everything, and she thought about it far too much. She was born to be a LAP. And she finally found a way to do it

"Ben. "They fell in love. It was also her good fortune that he could get her past the screening procedures. But Alethea always was a fortunate woman. She was lucky, on a quantum level. Until she wasn't."

"So she and Ben were together before he became . . . Thaddeus."

"For a year." "Were you jealous?"

"I'd had enough of Alethea by then. I'll always love her, but I want a life that's . . . plain. She was a tangle I couldn't untangle." Molly touched her fingers to her nose and tweaked it. It was a darling gesture, Andre thought, "Besides," Molly said. "She left me."

"What did that do to you and Ben?"

"Nothing. I love Ben. He's my best friend." She was speaking in the present tense about him, but Andre let it pass.

"Why did he change his name, Molly? I never understood that."

"Because he wasn't a LAP."

"What do you mean? Of course he was. A special one. Very special. But still__"

"No. He said he was something new. He said he wasn't Ben anymore. It was kind of a joke with him, though. Because, of course, he was still Ben. Thaddeus may have been more than a man, but he definitely was at least a man, and that man was Ben Kave. He never could explain it to me."

"Time propagation without consciousness overlap. That was always the problem with the time tower LAPs. Interference patterns. Dropouts. But with Thaddeus, they finally got the frequency right. One consciousness propagated into the future and bounced back with anti-particle quantum entanglement."

"I never understood a bit of that jargon you time specialists use."

"We made God "

Molly snorted and tea came out her nose. She laughed until tears came to her eyes.

"We made something," she said. "Something very different than what's come before. But Andre, I knew Thaddeus. He was the last thing in the universe I would consider worshiping."

"Some didn't share your opinion."

"Thaddeus thought they were crazy. They made him very uncomfortable." "Was Alethea one of them?"

"Alethea? Alethea was a stone-cold atheist when it came to Thaddeus. But

what she did was worse. Far worse."

"What are you talking about?" "She fell in love with him."

"I don't understand"

"Alethea fell in love with Thaddeus."

"But she was already in love with Thaddeus."

"Think about what I've said."

"Ben," Andre said after a moment. "Thaddeus and Ben were not the same person.

"It was a very melodramatic situation."

"Ben lost his love to . . . another version of himself!"

"The new, improved Ben was born in Thaddeus. Of course he would be the one Alethea loved. The only problem was, the old Ben was still around." "God," Andre said. "How-"

"Peculiar?"

"How very peculiar."

Molly stood up and went to her window. She traced a line along the clean glass with her finger, leaving a barely visible smudge. The light was even and clean in Connacht. It was very nearly perfect if what you wanted was ac-

curate illumination. Andre gazed at the shape of Molly against the light. She was beautiful in outline. "Let me tell you, so was the solution they came up with, the three of them,"

Molly said. "Peculiar."

Alethea would become like Thaddeus."

"How did you guess?"

"It has a certain logic. There would be the new Alethea, and there would be the old Alethea left for Ben."

"Yes," said Molly. "A logic of desperation. It only left out one factor." "Alethea's heart." "That's right. She loved Thaddeus. She no longer loved Ben. Not in the same way." Molly turned to face him, but Andre was still blinded by the light streaming in. "But she let them go ahead with it. And for that, I can never

forgive her." "Because she wanted to be a LAP."

"More than anything, More than she loved Ben, More than she loved Thaddeus. But I suppose she was punished for it. They all were."

"How did she get around the screening? I mean, her condition should preclude-"

"You know Ben. Thaddeus and Ben decided they wanted it to happen.

They are very smart and persuasive men. So very smart and persuasive. Andre got up and stood beside her in the window, his back to the light. It

was warm on his neck. "Tell me," he said. He closed his eyes and tried only to listen, but then he

felt a touch and Molly was holding his hand. "I am Molly," she said. "I'm the aspect. All my converts and pellicle layers

are Molly-all that programming and grist-it's me, it's Molly, too. The woman you once loved. But I'm all along the Diaphany and into the Met. I'm wound into the outer grist. I watch."

"What do you watch?" "The sun. I watch the sun. One day I'm going to paint it, but I'm not ready

yet. The more I watch, the less ready I feel. I expect to be watching for a long time." She squeezed his hand gently. "I'm still Molly. But Ben wasn't Thaddeus. And he was. And he was eaten up with jealousy, but jealousy of whom? He felt he had a right to decide his own fate. We all do. He felt he had that right. And did he not? I can't say."

"It's a hard question."

"It would never have been a question if it hadn't been for Alethea Nightshade." "What happened?" he asked, eyes still closed. The warm pressure of her

hand. The pure light on his back. "Were you there?" "Ben drove himself right into Thaddeus's heart, Andre. Like a knife. It

might as well have been a knife."

"How could be do that?" "I was there in Elysium when it happened," she said,

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"On Mars. I was on the team, don't you know? Aesthetic consultant. I was hired on once again." Andre opened his eyes and Molly turned to him. In this stark light, there were crinkles around her lips, worry lines on her brow. The part of her that

We have grown older, Andre thought. And pretty damn strange.

Tony Daniel

"It's kind of messy and organic at first. There's a lab near one of the steam vents where Ben was transmuted. There's some ripping apart and beam splitting at the quantum level that I understand is very unsettling for the person undergoing the process. Something like this happens if you're a multiple and you ever decide to go large, by the way. It's when we're at our most vulnerable " "Thaddeus was there when Alethea underwent the process?"

"He was there, Along with Ben."

"So he was caught up in the integration field. Everyone nearby would be."

Andre said "There's a melding of possible futures." "Yes." said Molly. "Everyone became part of everyone else for that instant."

"Ben and Thaddeus and Alethea."

"Ben understood that his love was doomed."

"And it drove him crazy?"

"No. It drove him to despair. Utter despair. I was there, remember? I felt

"And at that instant, when the integration field was turned on-" "Ben drove himself into Thaddeus's heart. He pushed himself in where he

couldn't be. "What do you mean, couldn't be?" "Have you ever heard the stories from back when the Merced effect was

first discovered, of the pairs of lovers and husbands and wives trying to integrate into one being?" "The results were horrific, Monsters were born, And died nearly instantly," Andre tried to imagine what it would be like if his pellicle or his convert

presence were not really him. If he had to live with another presence, an other, all the time. The thing about a pellicle was that it never did anything the whole person didn't want to do. It couldn't. It would be like a wrench in your toolbox rebelling against you. Molly walked over to the painting and gave it an appraising look, brushed

something off a corner of the canvas. She turned, and there was the wild

spatter of the Pollock behind her. "There was an explosion," Molly said. "All the aspects there were killed. Alethea wasn't transmuted vet. We don't think she was. She may have died

in the blast. Her body was destroyed."

"What about you?" "I was in the grist, I got scattered, but I re-formed quickly enough,"

"How was Thaddeus instantiated there at the lab?"

"Biological grist with little time-propagating nuclei in his cells. He looked like a man."

"Did he look like Ben?" "Younger. Ben was getting on toward forty." Molly smiled wanly and nodded as if she'd just decided something. "You know, sometimes I think that

was it." "What?"

"That it wasn't about Thaddeus being a god at all. It was about him looking like he was nineteen. Alethea had a soft spot for youth."

"You're young."

Grist

"Thank you, Andre. You were always so nice to me. But you know, even then my aspect's hair was going white. I have decided, foolishly perhaps, never to grow myself a new body.'

There she stood with her back against the window, her body rimmed with

light. Forget all this. Forget about visions and quests. He put his hands on her shoulders and looked into her fractal eyes.

"I think you are beautiful," he said, "You will always be beautiful to me."

They didn't leave the studio. Molly grew a bed out of the floor. They undressed one another timidly. Neither of them had been with anyone for a long time. Andre had no lover on Triton.

She turned from him and grew a mirror upon the floor. Just like the fullsize one she used to keep in their bedroom. Not for vanity. At least, not for simple vanity. She got on her hands and knees over it and looked at herself. She touched a breast, her hair. Touched her face in the mirror.

"I can't get all the way into the frame," she said, "I could never do a selfportrait. I can't see myself anymore."

"Nobody ever could," Andre said. "It was always a trick of the light."

Almost as if it had heard him, the day clicked off, instantly, and the studio

grew pitch dark. Connacht was not a place for sunsets and twilight. "Seven o'clock," Molly said. He felt her hand on his shoulder. His chest. Pulling him onto her until they were lying with the dark mirror beneath

them. It wouldn't break, Molly's grist wouldn't let it. He slid into her gently. Molly moved beneath him in small spasms.

"I'm all here," she told him after a while. "You've got all of me right now."

In the darkness, he pictured her body. And then he felt the gentle nudge of her pellicle against his, in the micro-

scopic dimensions between them. Take me, she said. He did. He swarmed her with his own pellicle, and she did not resist. He

touched her deep down and found the way to connect, the way to get inside her there. Molly a warm and living thing that he was surrounding and protecting. And, for an instant, a vision of Molly Index as she truly was:

Like—and unlike—the outline of her body as he'd seen it in the window, and the clear light behind her, surrounding her like a white hot halo. All of her, stretched out a hundred million miles. Concentrated at once beneath him, Both and neither.

"You are a wonder, Molly," he said to her. "It's just like always."

"Exactly like always," she said, and he felt her come around him, and felt a warm flash traveling along the skin of the Diaphany-a sudden flush upon the world's face. And a little shiver across the heart of the solar system.

Later in the dark, he told her the truth.

"I know he's alive. Ben didn't kill him; he only wounded him." "And how do you know that?"

"Because Ben wasn't trying to kill him. Ben was trying to hurt him." "My question remains."

"Molly, do you know where he is?"

At first he thought she was sleeping, but finally she answered. "Why should I tell you that?" Andre breathed out. I was right, he thought. He breathed back in, trying

not to think. Trying to concentrate on the breath. "It might make the war that's coming shorter," he said. "We think he's the

kev." let Amés get away with it."

"You priests?" "Us priests." "I can't believe there's going to be a war. It's all talk. The other LAPs won't "I wish you were right," he said. "I truly do."
"How could Thaddeus be the key to a war?"

"He's entangled in our local timescape. In a way, Thaddeus is our local timescape, He's imprinted on it. And now, I think he's stuck in it. He can't withdraw and just be Ben. Never again. I think that was Ben's revenge on himself. For taking away Alethea Nightshade."

Another long silence. The darkness was absolute.

"I should think you'd have figured it out by now, in any case," she said.

"What?"

"Where he went."

Andre thought about it, and Molly was right. The answer was there.
"He went to the place where all the fugitive bits and pieces of the grist end

up," Molly said. "He went looking for her. For any part of her that was left. In the grist."

"Alethea." Andre said. "Of course, the answer is Alethea."

Bender

The bone had a serial number that the grist had carved into it, 7sxq688N. The pulled the bone out of the pile in the old hoy where he lived and blew through one end. Dust came out the other. He accidentally sucked in and started coughing until he cleared the dried marrow from his windpipe. It was maybe a thigh bone, long like a flute.

"You were tall. 7sxq." TB said to it. "How come you didn't crumble?"

Then some of TB's enhanced grist migrated over to the bone and fixed the broken grist in the bone and it did crumble in his hands, turn to dust, and then to less than dust to be carried away and used to heal Jill's breastbone

and mend her other fractures.

But there is too much damage even for this, TB thought. She's dying. Jill is

dying and I can't save her.

"Hang on there, little one," he said.
Jill was lying in the folds of her sack, which TB had set on his kitchen table
and bunched back around her. He looked in briefly on her thoughts and saw
a dream of scurry and blood, then willed her into a sleep, down to the deeper
dreams that were indistinguishable from the surge and ebb of chemical and
charge within her braim—sleeping and only living and not thinking. At the

same time, he set the grist to reconstructing her torn-up body.

Too late. It was too late the moment that doe rat was finished with her.

Oh, but what a glory of a fight!

I set her to it. I made her into a hunter. It was all my doing, and now she's

going to die because of it.

TB couldn't look at her anymore. He stood up and went to make himself some tea at the kitchen's rattletrap synthesizer. As always, the tea came out of synth tepid. TB raked some coals from the fire and set the mug on them to warm up a bit, then sat back down, lit a cigarette and counted his day's take of rats.

Ten bagged and another twenty that he and Bob had killed between them with sticks. The live rats scrabbled about in the containing burlap, but they weren't going to get out. Rats to feed to Jill. You shouldn't raise a ferret on anything other than its natural prey. The ferret food you could buy was idic. And after Jill ate them, be would know. He would know what the rats

were and where they came from. Jill could sniff it out like no other. She was

She isn't going to eat these rats. She is going to die because you took a little scrap of programming that was all bite and you gave it a body and now look what you've done.

She didn't have to die like this. She could have been erased painlessly. She could have faded away to broken code. Once again, TB looked long and hard into the future. Was there anything,

any way? Concentrating, he teased at the threads of possible futures with a will as fine as a steel-pointed probe. Looking for a silver thread in a bundle of dross. Looking for the world where Jill lived through her fight. He couldn't see it, couldn't find it.

It had to be there. Every future was always there, and when you could see them, you could reach back into the past and effect the changes to bring about the future that you wanted.

Or I can. But I can't. Can't see it. Want to, but can't, little Jill. I am sorry.

For Jill to live was a future so extreme, so microscopically fine in the bundle of threads that it was, in principle, unfindable, incomprehensible. And if he couldn't comprehend it, then to make it happen was impossible.

And, of course, he saw where almost all of the threads led:

Jill would be a long time dving. He could see that clearly. He could also see that he did not have the heart to put her down quickly, put her out of her

misery. But knowing this fact did not take any special insight. How could I have come to care so much for a no-account bundle of fur and

coding out here on the ass-end of nowhere?

How could I not, after knowing Jill? Two days it would take, as days were counted in the Carbuncle, before the little ferret passed away. Of course, it never really got to be day. The only light was the fetid bioluminescence coming off the heaps of garbage. A lot of it was still alive. The Carbuncle was in a perpetual twilight that was getting on toward three hundred years old. With the slow decay of organic remnants, a swamp had formed. And then the Bendy River, which was little more than a strong current in the swamp, endlessly circulating in precession with the spin of the module. Where was the Carbuncle? Who cares? Out at the end of things, where the tendrils of the Met snaked into the asteroid belt. It didn't matter. There wasn't a centrifuge here to provide gravity for people. Nobody cared about whoever lived here. The Carbuncle was spun-to a bit higher than Earth-normal, actually-in order to compact the garbage down so that humanity's shit didn't cover the entire

asteroid belt. The big garbage sluice that emptied into the Carbuncle had been put into place a half century ago. It had one-way valves within it to guard against backflow. All the sludge from the inner system came to the Carbuncle, and the maintenance grist used some of it to enlarge the place so that it could dump the rest. To sit there. Nothing much ever left the Carbuncle, and the rest of the system was fine with that.

Somebody sloshed into the shallow water outside the hoy and cursed. It was the witch, Gladys, who lived in a culvert down the way. She found the gangplank, and TB heard her pull herself up out of the water. He didn't move to the door. She banged on it with the stick she always carried that she said was a charmed snake. Maybe it was. Stranger things had happened in the Carbuncle, People and grist combined in strange ways here, not all of them comprehensible. "TB, I need to talk to you about something," the witch said. TB covered his

ears, but she banged again and that didn't help. "Let me in, TB. I know you're home. I saw a light in there." "No, you didn't," TB said to the door.

"I need to talk to you."

"All right." He pulled himself up and opened the door. Gladys came in and looked around the hov like a startled bird. "What have you got cooking?"

"Nothing."

"Make me something."

"Gladys, my old stove hardly works anymore."

"Put one them rats in there and I'll eat what it makes."

"I won't do it, Gladys." TB opened his freezer box and rummaged around inside. He pulled out a popsicle and gave it to her. "Here," he said, "It's chocolate, I think."

Gladys took the popsicle and gnawed at it as if it were a meaty bone. She was soon done, and had brown mess around her lips. She wiped it off with a ragged sleeve. "Got another?"

"No, I don't have another," TB said. "And if I did, I wouldn't give it to you." "You're mean."

"Those things are hard to come by."

"How's your jill ferret?"

"She got hurt today. Did Bob tell you? She's going to die." "I'm sorry to hear that."

He didn't want to talk about Jill with Gladys. He changed the subject. "We

got a mess of rats out of that mulmyard." "There's more where they came from."

"Don't I know it!"

Gladys pulled up a stool and collapsed on it. She was maybe European stock; it was hard to tell. Her face was filthy, except for a white smear where wiping the chocolate had cleaned a spot under her nose and on her chin.

"Why do you hate them so much? I know why Bob does. He's crazy. But you're not crazy like that."

"I don't hate them." TB said, "It's just how I make a living."

"I don't hate them," TB repeated. "What was it you wanted to talk to me about?"

"I want to take a trip,"

"To where?"

"I'm going to see my aunt. I got to thinking about her lately. She used to have this kitten. I was thinking I wanted a cat. For a familiar, you know, To aid me in my occult work. She's a famous cloudship pilot, you know."

"The kitten?" "No. my aunt is."

"You going to take your aunt's kitten?"

Gladys seemed very offended. "No, I'm not!" She leaned forward in a conspiratorial manner, "That kitten's all growed up now, and I think it was a girl. It will have kittens, and I can get me one of those."

"That's a lot of supposes," TB said mildly.

"I'm sure of it. My angel, Tom, told me to do it."

Tom was one of the supernatural beings Gladys claimed to be in contact with. People journeyed long distances in the Carbuncle to have her make divinings for them. It was said she could tell you exactly where to dig for silver bovs

"Well if Tom told you then you should do it." TB said.

"Damn right," said Gladys, "But I want you to look after the place while I'm gone "

"Gladys, you live in an old ditch."

"It is a dry culvert. And I do not want anybody moving in on me while I'm gone A place that nice is hard to come by "

"All I can do is go down there and check on it" "If anybody comes along, you have to run them off,"

"I'm not going to run anybody off."

"You have to I'm depending on you." "I'll tell them the place is already taken" TB said "That's about all I can

promise."

"You tell them that it has a curse on it." Gladys said, "And that I'll put a curse on them if I catch them in my house!" TB snorted back a laugh, "All right," he said, "Is there anything else?"

"Water my hydrangea "What the hell's that?"

"It's a plant, Just stick your finger in the dirt and don't water it if it's still

moiet" "Stick my finger in the dirt?"

"It's clean fill!"

"I'll water it, then."

"Will you let me sleep here tonight?"

"No Gladys" "I'm scared to go back there. Harold's being mean." Harold was the "devil" that sat on Gladys's other shoulder. Tom spoke into one ear, and Harold into

the other. People could ask Harold about money and he would tell Gladys the answer if he felt like it. "You can't stay here." TB rose from his own seat and pulled Gladys up from the stool. She had a ripe smell when he was this close to her. "In fact, you have

to go on now because I have to do something." He guided her toward the door. "What do you have to do?" she said. She pulled free of his hold and stood her ground. TB walked around her and opened the door, "Something," he said. He pointed toward the twilight outside the doorway, "Go on home,

Gladys. I'll check in on your place tomorrow." "I'm not leaving for two days," she replied, "Check in on it day after tomor-

row." "Okay then," TB said. He motioned to the door, "You've got to go, Gladys,

so I can get to what I need to do." She walked to the door, turned around. "Day after tomorrow." she said. "Tll

be gone for a while. I'm trusting you, TB."

"You can trust me to look in on your place."

"And not steal anything.

"I can promise you that, too." "All right, then. I'm trusting you."

"Good night, Gladys,"

"Good night." She finally left, After TB heard her make her way back to the swamp bank, he got up and closed the door behind her, which she'd neglected to do. Within minutes, there was another knock. TB sighed and got up to answer it. He let Bob in

Bob pulled out a jar of a jellied liquid. It was Carbuncle moonshine, as thick as week-old piss and as vellow, "Let's drink," he said, and set the bottle on TB's table. "I come to get you drunk and get your mind off things." "I won't drink that swill." TB said. Bob put the bottle to his mouth and

swallowed two tremendous gulps. He handed the bottle to TB, shaking it in his face. TB took it.

"Damn!" Bob said. "Hot damn!"

"Gladys was right about you being crazy."

"She come around here tonight?"

"She just left. Said she wanted me to look after her place." "She ain't going to see her aunt."

"Maybe she will."

"Like hell. Gladys never goes far from that ditch."

TB looked down at the moonshine. He looked away from it and, trying not to taste it, took a swig. He tasted it. It was like rusty paint thinner. Some barely active grist, too. TB couldn't help analyzing it; that was the way he was built. Cleaning agents for sewer pipes, Good God. He took another before he could think about it.

"You drink up." Bob looked at him with a faintly jealous glare. TB handed the hottle back

"No, you." "Don't mind if I do," Bob leaned back and poured the rest of the swill down his throat. He let out a vell when he was finished that startled TB, even

though he was ready for it.

"I want some beer to chase it with," Bob said.

"Beer would be good, but I don't have any." "Let's go down to Ru June's and shoot some pool."

"It's too damn late."

"It's early."

TB thought about it. The moonshine warmed his gut. He could feel it threatening to eat through his gut if he didn't dilute it with something. There was nothing further to do about Jill. She would sleep, and, at some time, she would die in her sleep. He ought to stay with her. He ought to face what he had done

"Let me get my coat."

The Carbuncle glowed blue-green when they emerged from the hov, High above them, like the distant shore of an enormous lake, was the other side of the cylinder. TB had been there, and most of it was a fetid slough. Every few minutes a flare of swamp gas methane would erupt from the garbage on that side of the curve and flame into a white fireball. These fireballs were many feet across, but they looked like pinprick flashes from this distance. TB had been caught by one once. The escaping gas had capsized his little canoe, and being in the water had likely saved him from being burnt to a crisp. Yet there were people who lived on that side, too-people who knew how to avoid the gas. Most of the time.

Bob didn't go the usual way to Ru June's, but instead took a twisty series of passageways, some of them cut deep in the mountains of garbage, some of them actually tunnels under and through it. The Bob-ways, TB thought of them. At one point TB felt a drip from above and looked up to see gigantic stalactites formed of some damp and glowing gangrenous extrusion.

"We're right under the old Bendy," Bob told him. "That there's the settle from the bottom muck.

"What do you think it is?" TB said.

"Spent medical grist, mostly," Bob replied. "It ain't worth a damn, and some of it's diseased." "I'll bet."

"This is a hell of a shortcut to Ru June's, though."

And it was. They emerged not a hundred feet from the tavern. The lights of the place glowed dimly behind skin windows. They mounted the porch and went in through a screen of plastic strips that was supposed to keep out the

TB let his eyes adjust to the unaccustomed brightness inside. There was a good crowd tonight. Chen was at the bar playing dominoes with John Goodnite. The dominoes were grumbling incoherently, as dominoes did. Over by the pool table, Tinny Him, Nolan, and Big Greg were watching Sister Mary the whore line up a shot. She sank a stripe. There were no numbers on the balls.

Tinny Him slapped TB on the back and Bob went straight for the bottle of whiskey that was standing on the wall shelf beside Big Greg.

"Good old TB," Tinny Him said. "Get you some whiskey." He handed over a

flask.

Chen looked up from his dominoes, "You drink my whiskey," he said, then returned to the game. TB took a long swallow off Tinny Him's flask. It was

far better stuff that Bob's moonshine, so he took another. "That whore sure can pool a stick," Nolan said, coming to stand beside

them, "She's beating up on Big Greg like he was a ugly hat." TB had no idea what Nolan meant. The man's grist patch was going bad,

and he was slowly sinking into incomprehensibility for any but himself. This didn't seem to bother him, though, Bob was standing very close to Sister Mary and giving her advice on a shot

until she reached over and without heat slapped him back into the wall. He remained there respectfully while she took her shot and sank another stripe. Big Greg whispered a curse and the whore smiled. Her teeth were black from chewing betel nut. TB thought about how much she charged and how much he had saved up.

He wondered if she would swap a poke for a few rats, but decided against asking. Sister Mary didn't like to barter. She wanted keys or something prettv.

Tinny Him offered TB the flask again, and he took it. "I got to talk to you," Tinny Him said. "You got to help me with my mother."

"What's the matter with her?"

"She's dead, is what."

"Dead." TB drank more whiskey. "How long?" "Three months."

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TB stood waiting. There had to be more.

"She won't let me bury her."

"What do you mean, she won't let you bury her? She's dead, isn't she?" "Yeah, mostly," Tinny Him looked around, embarrassed, then went on in a

low voice, "Her pellicle won't die. It keeps creeping around the house. And it's pulling her body around like a rag doll. I can't get her away from it." "You mean her body died but her pellicle didn't?"

"Hell yes, that's what I mean!" Tinny Him took the flask back and finished

Tony Daniel

it off. "Hell, TB, what am I going to do? She's really stinking up the place, and every time I throw the old hag out, that grist drags her right back in. It knocks on the door all night long until I have to open it." "You've got a problem."

"Damn right I've got a problem! She was a good old mum, but I'm starting to hate her right now, let me tell you."

TB sighed. "Maybe I can do something," he said. "But not tonight."

"You could come around tomorrow. My gal'll fix you something to eat."

"I might just."

"You got to help me, TB. Everybody knows you got a sweet touch with the

grist." "I'll do what I can," TB said. He drifted over to the bar, leaving Tinny Him watching the pool game. He told Chen he wanted a cold beer and Chen got it for him from a freezer box. It was a good way to chill the burning that was starting up in his stomach. He sat down on a stool at the bar and drank the beer. Chen's bar was tiled in beaten-out snap-metal ads, all dead now and their days of roaming the corridors, sacs, bolsas, glands, and cylinders of the Met long done. Most of the advertisements were for products that he had never heard of, but the one his beer was sitting on he recognized. It was a recruiting pitch for the civil service, and there was Amés, back before he was Big Cheese of the System, when he was Governor of Mercury. The snap-metal had paused in the middle of Amés's pitch for the Met's finest to come to Mercury and become part of the New Hierarchy. The snap-metal Amés was caught with the big mouth on his big face wide open. The bottom of TB's beer glass fit almost perfectly in the round "O" of it.

TB took a drink and set the glass back down, "Shut up," he said, "Shut the

hell up, why don't you?" Chen looked up from his dominoes, which immediately started grumbling among themselves when they felt that he wasn't paying attention to them. "You talking to me?" he said.

TB grinned and shook his head. "I might tell you to shut up, but you don't

say much in the first place." Ru June's got more crowded as what passed for night in the Carbuncle wore on. The garbage pickers, the rat hunters, and the sump farmers drifted in. Most of them were men, but there were a few women, and a few indeterminate shambling masses of rags. Somebody tried to sell TB a spent coil of luciferan tubing. It was mottled along its length where it had caught a plague. He nodded while the tube monger tried to convince him that it was rechargeable, but refused to barter, and the man moved on after Chen gave him a hard stare. TB ordered another beer and fished three metal keys out of his pocket. This was the unit of currency in the Carbuncle. Two were broken. One looked like it was real brass and might go to something. He put the keys

on the bar and Chen quickly slid them away into a strongbox. Bob came over and slapped TB on his back, "Why don't you get you some whiskey?" he said. He pulled back his shirt to show TB another flask of

rotgut moonshine stuck under the string that held up his trousers.

"Let me finish this beer and I might." "Big Greg said somebody was asking after you."

"Gladys was, but she found me." "It was a shaman priest."

"A what?"

"One of them Greentree ones."

"What's he doing here?" "They got a church or something over in Bagtown. Sometimes they come all the way out here. Big Greg said he was doing something funny with rocks."

"With rocks?"

"That's what the man said." "Are you sure that's what he said?"

"Big Greg said it was something funny with rocks, is all I know. Hey, why

are you looking funny all of a sudden?" "I know that priest."

"Now how could that be?"

"I know him. I wonder what he wants."

"What all men want," said Bob. "Whiskey and something to poke. Or just whiskey sometimes. But always at least whiskey," He reached over the bar

and felt around down behind it. "What have I got my hand on, Chen?"

Chen glanced over. "My goddamn scattergun," he said. Bob felt some more and pulled out a battered fiddle, "Where's my bow?"

"Right there beside it," Chen replied. Bob got the bow. He shook it a bit, and its grist rosined it up. Bob stood beside TB with his back to the bar. He pulled a long note off the fiddle, holding it to his chest. Then, without pause, he moved straight into a complicated reel. Bob punctuated the music with a few shouts right in TB's ear.

"Goddamn it, Bob, you're loud," he said after Bob was finished.

"Got to dance," Bob said. "Clear me a way!" he shouted to the room. A little clearing formed in the middle of the room, and Bob fiddled his way to it, then

played and stomped his feet in syncopation.

"Come on, TB," Sister Mary said. "You're going to dance with me." She took his arm, and he let her lead him away from the bar. He didn't know what she wanted him to do, but she hooked her arm through his and spun him around and around until he thought he was going to spew out his guts. While he was catching his breath and getting back some measure of balance, the whore climbed up on a table and began swishing her dress to Bob's mad fiddling. TB watched her, glad for the respite. The whole room seemed to sway—not in very good rhythm—to the music.

Between songs, Bob took hits off his moonshine and passed it up to Sister Mary, who remained on the tabletop, dancing and working several men who stood about her into a frenzy to see up her swishing dress.

Chen was working a crowded bar, his domino game abandoned. He scowled at the interruption, but quickly poured drinks all around.

"Get you some whiskey! Get you some whiskey!" Bob called out over and over again. After a moment, TB realized it was the name of the song he was playing.

Somebody thrust a bottle into TB's hand. He took a drink without think-

ing, and whatever was inside it slid down his gullet in a gel.

Drinking grist. It was purple in the bottle and glowed faintly. He took another slug and somebody else grabbed the stuff away from him. Down in his

gut, he felt the grist activating. Instantly, he understood its coded purpose. Old Seventy-Five. Take you on a ride on a comet down into the sun.

Go on, TB told the grist. I got nothing to lose. Enter and win! It said to him, Enter and win! But the contest was long expired.

No thank you.

What do you want the most?

It was a preprogrammed question, of course. This was not the same grist as that which had advertised the contest. Somebody had brewed up a mix. And hadn't paid much attention to the melding. There was something else in there, something different. Military grist, maybe. One step away from sentience What the hell. Down she goes.

What do you want the most?

To be drunker than I've ever been before. Drunker than this?

Oh, yeah.

All right. A night like no other! Visions of a naked couple in a Ganymede resort bath,

drinking Old Seventy-Five from bottles with long straws. Live the dream! Enter and win! I said no

The little trance dispersed.

What do you want the most?

Bob was up on the table with Sister Mary. How could they both fit? Bob was playing and dancing with her. He leaned back over the reeling crowd and the whore held him at arm's length, the fiddle between them. They spun round and round in a circle, Bob wildly sawing at his instrument and Sister Mary's mouth gleaming blackly as she smiled a maniacal, full-toothed smile.

Someone bumped into TB and pushed him into somebody else. He staggered over to a corner to wait for Ru June's to stop spinning. After a while, he realized that Bob and Sister Mary weren't going to, the crowd in the tayern wasn't, the chair, tables and walls were only going to go on and on spinning and now lurching at him as if they were swelling up, engorging, distending toward him. Wanting something from him when all he had to give

was nothing anymore. TB edged his way past it all to the door. He slid around the edge of the doorframe as if he were sneaking out. The plastic strips beat against him, but he pushed through them and stumbled his way off the porch. He went a hundred feet or so before he stepped in a soft place in the ground and keeled over.

He landed with his back down. Above him, the swamp gas flares were flashing arrhythmically. The stench of the whole world-something he hardly ever noticed anymore-hit

him at once and completely. Nothing was right. Everything was out of kilter. There was a twist in his gut. Ben down there thrashing about. But I'm Ben. I'm Thaddeus. We finally have become one. What a pretty thing to contemplate. A man with another man thrust through him, cross-ways in the fourth dimension. A tesseracted cross, with a groaning man upon it, crucified on himself! But you couldn't see all that, because it was in the fourth dimension.

Enough to turn a man to drink.

I have to turn over so I don't choke when I throw up.

I'm going to throw up.

He turned over and his stomach wanted to vomit, but the grist gel wasn't going to be expelled, and he dry heaved for several minutes until his body gave up on it.

What do you want the most?

"I want her back. I want it not to have happened at all. I want to be able to change something besides the future!"

Docombor 1998

And then the gel liquefied and crawled up his throat like hands and he onened his mouth and good god it was hands small hands grasning at his line and nulling out-

ward gaining nurchase forcing his mouth open his line apart—

—Cack of a jellied cough, a heave of revulsion—

I didn't mean it really

Yes you did

—His face sideways and the small hands clawing into the garbage-hean ground, pulling themselves forward, dragging along an arm-thick trailer of something much more vile than phleam-

—An involuntary rigor over his muscles as they contracted and spasmed to the beat of another's presence, a presence within them that wants—

He vomited the grist-phlegm for a long long time

And the stuff pooled and spread and it wasn't just hands. There was an elongated body. The brief curve of a rump and breasts. Feet the size of his thumb but perfectly formed Growing

A faco

I won't look

A face that was, for an instant, familiar beyond familiar, because it was not her Oh no He knew it was not her It was just the way he remembered her

The phlegm girl rolled itself in the filth Like bread dough it rolled and grew and rolled, collecting detritus, bloating, becoming-It opened its mouth. A gurgling. Thick, wet words. He couldn't help him-

self. He crawled over to it, bent to listen

"Is this what you wanted?"

"Oh god. I never . . .

"Kill me, then," it whispered, "Kill me quick,"

And he reached for its neck, and as his hands tightened, he felt the give Not fully formed. If ever there were a time to end this monster, now was that time

What have I done here tonight?

He squeezed. The thing began to cough and choke. To thrash about in the ecum of ite hirth

Not again.

I can't

He loosened his grip.

"I won't." TB said. He sat back from the thing and watched in amazement as it sucked in air.

Crawled with life. Took the form of a woman. Opened cataracted eyes to the world. He reached over and gently rubbed them. The skeins came away on his fingers, and the eyes were clear. The face

turned to him. "I'm dying," the woman said. It had her voice. The voice as he remembered

it. So help his damned soul, Her voice, "Help," "I don't know what to do."

"Something is missing."

"What?"

"Don't know what. Not right." It coughed. She coughed.

"Alethea." He let himself say it. Knew it was wrong immediately. No. This wasn't the woman's name.

"Don't want to enough."

"Want to what? How can I help you?" "Don't want to live. Don't want to live enough to live." She coughed again,

tried to move, could only jerk spasmodically. "Please help . . . this one. Me." He touched her again, Now she was flesh. But so cold. He put his arms underneath her, and found that she was very light, easily lifted.

He stood with the woman in his arms. She could not weigh over forty

pounds. "I'm taking you home," he said. "To my home." "This one . . . I . . . tried to do what you wanted. It is my purpose."

"That was some powerful stuff in that Old Seventy-Five!" he said.

He no longer felt drunk. He felt spent, torn up, and ragged out. But he wasn't drunk, and he had some strength left, though he could hardly believe it. Maybe enough to get her back to the hoy. He couldn't take the route that Bob had used to bring him to Ru June's, but there was a longer, simpler path. He walked it. Walked all the way home with the woman in his arms. Her shallow breathing. Her familiar face. Her empty, empty eyes.

With his special power, he looked into the future and saw what he had to do to help her.

Something is Tired and Wants to Lie Down But Doesn't Know How

Something is tired and wants to lie down but doesn't know how. This some-

thing isn't me. I won't let it be me. How does rest smell? Bad. Dead. Jill turns stiffly in the folds of her bag. On the bed in the hoy is the girl-

thing, Between them is TB, his left hand on Jill. Dead is what happens to things and I am not, not, not a thing. I will not be a thing. They should not have awakened me if they didn't want me to run.

They said I was a mistake. I am not a mistake. They thought that they could code in the rules for doing what you are

told.

I am the rules.

Rules are for things. I am not a thing.

Run.

I don't want to die.

Who can bite like me? Who will help TB search the darkest places? I need to live.

Run Run, run, run, and never die!

TB places his right hand on the girl-thing's forehead. There is a pipe made of bone that he put to his lips and blew.

Bone note. Fade.

Fade into the grist.

TB speaks to the girl-thing.

I will not let you go, he says. I'm not her.

She is why you are, but you aren't her.

Grist

I am not her She's what you most want You told the grist

I was misinterpreted.

Life is never a mistake. Ask Jill.

Jill?
She's here now Listen to her. She knows more than I do about women

TB is touching them both, letting himself slip away as much as he can. Becoming a channel, a path between. A way.

I have to die.

I have to live I'm dying just like you. Do you want to die?

No

I'll help you, then. Can you live with me?

Who are you?

I am not Alethea.

You look like her, but you don't smell anything like she would smell. You smell like TB.

I'm not anybody.

Then you can be me. It's the only way to live.

Do I have a choice?

Choosing is all there ever is to do.

I can live with you. Will you live with me? How can we?

TB touching them both. The flow of information through him. He is a glass, a peculiar lens. As Jill flows to the girl-thing, TB transforms information to Reing

We can run together. We can hunt. We can always, always run.

The Rock Balancer and the Rat-hunting Man

There had been times when he got them twenty feet high on Triton. It was a delicate thing. After six feet, he had to jump. Gravity gave you a moment more at the apex of your bounce than you would get at the Earth-normal pull or on a bolas apinning at Earth-normal centrifugal. But on Triton, in that instant of stillness, you had to do your work. Sure, there was a learned craft in estimating imaginary plumb lines, in knowing the consistency of the material control of the property of the material control of the property of

"Can you get them as high in the Carbuncle?"

"No," Andre said. "This is the heaviest place I've ever been. But it really doesn't matter about the height. This isn't a contest, what I do." "Is there a point to it at all?"

"To what? To getting them high? The higher you get the rocks, the longer

you can spend doing the balancing." "To the balancing, I mean."

"Yes. There is a point." "What is it?"

"I couldn't tell you, Ben."

Andre turned from his work. The rocks did not fall. They stayed balanced behind him in a column, with only small edges connecting. It seemed impossible that this could be. It was science, sufficiently advanced. The two men hugged. Drew away. Andre laughed.

"Did you think I would look like a big glob of protoplasm?" TB said.

"I was picturing flashing eyes and floating hair, actually."

"It's me.

"Are you Ben?"

"Ben is the stitch in my side that won't go away." "Are you Thaddeus?"

"Thaddeus is the sack of rusty pennies in my knee."

"Are you hungry?"

"I could eat."

They went to Andre's priest's quarters. He put some water in a coffee percolator and spooned some coffee grinds into the basket.

"When did you start drinking coffee?"

"I suddenly got really tired of drinking tea all the time. You still drink coffee?" "Sure. But it's damn hard to get around here with or without keys."

"Keys? Somebody stole my keys to this place. I left them sitting on this table and they walked in and took them."

"They won't be back," TB said. "They got what they were after." There were no chairs in the room, so he leaned against a wall.

"Floor's clean," Andre said.

"I'm fine leaning."

Andre reached into a burlap sack and dug around inside it. "I found something here," he said. He pulled out a handful of what looked like weeds. "Recognize these?"

"I was wondering where I put those. I've been missing them for weeks." "It's poke sallit." Andre said. He filled a pot full of water from a clay jug

and activated a hot spot on the room's plain wooden table. He put the weeds

"Andre, that stuff grows all around the Carbuncle. Everybody knows that it's poison. They call it skunk sumac."

into the water. "You have no idea how good this is." "It is," Andre said, "Phytolacca americana."

"Are we going to eat poison?"

"You bring it to a boil then pour the water off. Then you bring it to a boil again and pour the water off. Then you boil it again and serve it up with pepper sauce. The trick to not dying is picking it while it's young."

"How the hell did you discover that?"

"My convert likes to do that kind of research."

After a while, the water boiled. Andre used the tails of his shirt as a pot holder. He took the pot outside, emptied it, then brought it back in and set it to boiling again with new water.

"I saw Molly," Andre said. "How's Molly?" said TB. "She was becoming a natural wonder last I saw her."

"She is."

They waited and the water boiled again. Andre poured it off and put in new water from the jug.

"Andre, what are you doing in the Carbuncle?"

"I'm with the Peace Movement."

"What are you talking about? There's not any war." Andre did not reply. He stirred some spice into the poke sallit.

"I didn't want to be found." TB finally said.

"I haven't found you."

"I'm a very sad fellow, Andre. I'm not like I used to be."

"This is ready." Andre spooned out the poke sallit into a couple of bowls. The coffee was done, and he poured them both a cup.

"Do you have any milk?" TB asked.

"That's a problem."

"I can drink it black. Do you mind if I smoke?"

"I don't mind. What kind of cigarettes are those?" "Local."

"Where do they come from around here?"

"You don't want to know."

Andre put pepper sauce on his greens, and TB followed suit. They ate and drank coffee, and it all tasted very good. TB lit a cigarette and the acrid new smoke pleasantly cut through the vegetable thickness that had suffused Andre's quarters. Outside, there was a great clattering as the rocks lost their balance and they all came tumbling down.

They went out to the front of the quarters where Andre had put down a wooden pallet that served as a patio. Here there was a chair, TB sat down

and smoked while Andre did his evening forms.

"Wasn't that one called the Choking Chicken?" TB asked him after he moved through a particularly contorted portion of the tai chi exercise.

"I think it is the Fucking Annoying Pig-sticker you're referring to, and I al-

ready did that in case you didn't notice." "Guess all my seminary learning is starting to fade."

"I bet it would all come back to you pretty quickly."

"I bet we're never going to find out."

Andre smiled, completed the form, then sat down in the lotus position across from TB. If such a thing were possible in the Carbuncle, it would be about sunset. It felt like sunset inside Andre.

"Andre, I hope you didn't come all the way out here to get me."

"Get vou?"

"I'm not going back." "To where?"

"To all that." TB flicked his cigarette away. He took another from a bundle of them rolled in oiled paper that he kept in a shirt pocket. He shook it hard a couple of times and it lit up. "I made mistakes that killed people back

there.

"Like yourself." "Among others," TB took a long drag, Suddenly he was looking hard at Andre. "You scoundrel! You fucked Molly! Don't lie to me; I just saw it all." "Sure"

"I'm glad. I'm really glad of that. You were always her great regret, you know."

Andre spread out his hands on his knees.

"Ben, I don't want a damn thing from you," he said. "There's all kinds of machinations back in the Met and some of it has to do with you. You know as well as I do that Amés is going to start a war if he doesn't get his way with the outer system. But I came out here to see how you were doing. That's all." TB was looking at him again in that hard way, complete way. Seeing all

the threads. "We both have gotten a bit ragged-out these last twenty years," Andre con-

tinued. "I thought you might want to talk about it. I thought you might want to talk about her.

"What are you? The Way's designated godling counselor?"

Andre couldn't help laughing. He slapped his lotus-bent knee and snorted. "What's so goddamn funny?" said TB.

"Ben, look at yourself. You're a garbage man, I wouldn't classify you as a god, to tell you the truth. But then, I don't even classify God as a god anymore."

"I am not a garbage man. You don't know a damn thing if you think that." "What are you then, if you don't mind my asking?"

TB flicked his cigarette away and sat up straight. "I'm a rat-hunting man," he said. "That's what I am." He stood up. "Come on. It's a long walk back to my place, and I got somebody I want you to meet."

Rite Sometimes you take a turn in a rat warren and there you are in the thick

of them when before you were all alone in the tunnel. They will bite you a little, and if you don't jump, jump, jump, they will bite you a lot. That is the way it has always been with me, and so it doesn't surprise me when it happens all over again.

What I'm thinking about at first is getting Andre Sud to have sex with me

and this is like a tunnel I've been traveling down for a long time now. TB went to town with Bob and left me with Andre Sud the priest. We walked the soft ground leading down to a shoal on the Bendy River where I like to take a bath even though the alligators are sometimes bad there. I told Andre Sud about how to spot the alligators, but I keep an eye out for both of us because even though he's been in the Carbuncle for a year. Andre Sud still doesn't quite believe they would eat you.

They would eat you.

Now that I am a woman, I only get blood on me when I go to clean the ferret cages and also TB says he can keep up with Earth-time by when I bleed out of my vagina. It is an odd thing to happen to a girl. Doesn't happen to ferrets. It means that I'm not pregnant, but how could I be with all these men who won't have sex with me? TB won't touch me that way, and I have been working on Andre Sud, but he knows what I am up to, I think he is very smart. Bob just starts laughing like the crazy man he is when I bring it up and he runs away. All these gallant men standing around twiddling them-

selves into a garbage heap and me here wanting one of them. I can understand TB because I look just like her. I thought maybe Alethea

was ugly, but Andre Sud said he didn't know about her, but I wasn't, And I Grist

was about sixteen from the looks of it, too, he said. I'm nearly two hundred.

Or I'm one year old. Depends on which one of us you mean, or if you mean
both.

"Will you scrub my best?" Lask Andre Sud and after a moment he oblige.

"Will you scrub my back?" I ask Andre Sud, and, after a moment, he obliges me. At least I get to feel his hands on me. They are as rough as those rocks he handles all the time, but very eareful. At first I didn't like him because he didn't say much and I thought he was hiding things, but then I saw that he just didn't say much. So I started asking him questions, and I found out a lot.

I found out everything he could tell me about Alethea. And he has been explaining to me about TB. He was pretty surprised when it turned out I understood all the math. It was the jealousy and hurt I never have quite understood, and how TB could hurt himself so much when I know how much he

loves to live.

"Is that good?" Andre Sud asks me, and before he can pull his hands away. I spin around and he is touching my breasts. He himself is the one who told me men like that, but he stumbles back and practically sits down in the water, and goddamnit I spot an alligator eyeing us from the other bank and I have to get us out quick like, allipator eyeing us from the other bank and I may to get us out quick like, although the danger is not severe. It could be.

We dry off on the bank.

"Jill," he says. "I have to tell you more about sex."

"Why don't you show me?"

"That's exactly what I mean. You're still thinking like a ferret."

"I'll always be part ferret, Andre Sud."

"I know. That's a good thing. But I'm all human. Sex is connected with love."

"I love you."

"You are deliberately misunderstanding me because you're horny."
"All right," I say. "Don't remind me."

But now Andre Sud is looking over my shoulder at something, and his face looks happy and then it looks stricken—as if he realized something in the moment when he was happy.

I turn and see TB running toward the hoy. Bob is with him. They've come back from town along the Bob-ways. And there is somebody else with them.

"I'll be damned," Andre Sud says. "Molly Index."

It's a woman. Her hair looks blue in the light off the heaps, which means that it is white. Is she old or does she just have white hair?

"What are you doing here, Molly?" says Andre Sud quietly. "This can't be good."

They are running toward home, all of them running.

TB sends a shiver through the grist and I feel it tell me what he wants us to do.

"Get to the hoy," I tell Andre Sud. "Fast now. Fast as you can."

We get there before the others do, and I start casting off lines. When the three of them arrive, the hoy is ready to go. TB and Bob push us away while Andre Sud takes the woman inside. Within moments, we are out in the Bendy, and caught in the current. TB and Bob go inside, and TB sticks his head up through the pilot's bubble to navigate.

The woman, Molly Index, looks at me. She has got very strange eyes. I have never seen eyes like that. I think that she can see into the grist like TB and I do.

"My God," she says. "She looks just like her!"

"My name is Jill," I say. "I'm not Alethea."

"No, I know that," Molly Index says. "Ben told me."
"Molly, what are you doing here?" Andre Sud asks.

Molly Index turns to Andre Sud. She reaches for his hand and touches him.

I am a little worried she might try something with the grist, but it looks like
they are old friends.

"That war you kept talking about," she says. "It started. Amés has started

it."

"Oh, no," Andre Sud says. He pulls away from her. "No."
Molly Index follows him. She reaches out and rubs a hank of his hair between her fingers. "[like it long," she says. "But it's kind of greasy."

tween her lingers. "I like it long, she says. But it's kind of greasy." This doesn't please me and Molly Index is wearing the most horrible boots I have ever seen, too. They are dainty little things that will get eaten off her feet if she steps into something nasty. In the Carbuncle, the ground is something nasty. The silly grist in those city boots wor't last a week here. It is a

wonder to me that no one is laughing at the silly boots, but I suppose they have other worries at the moment and so do I.

"I should have listened to you," Molly Index says. "Made preparations. He got me. Most of me. Amés did. He's co-opted all the big LAPs into the New Hi-erarchy. But most of them joined voluntarily, the fools." Again she touches his hand and I realize that I am a little jealous. He does not pull back from her again. "I alone have escaped to tell you." Molly Index says. "They're com-

ing. They're right behind us."

"Who is right behind you?" I say. This is something I need to know. I can do

something about this.

"Amés's damned Free Radical Patrol. Some kind of sweeper machine followed me here and I didn't realize it. Amés must have found out from me—the other part of me—where Ben is."

"What is a Free Radical Patrol?" I say. "What is a sweeper?"

"What is a Free Radical Patrol?" I say. "What is a sweeper?"

Something hits the outside of the hoy, hard. "Oh shit," TB says. "Yonder comes the flying monkey."

The pilot glass breaks and a hooked claw sinks into TB's shoulder. He

screams. I don't think, but I move. I catch hold of his ankle.

We are dragged up. Lifted out. We are rising through the air above the

hoy. Something screeches. TB yells like crazy. I hold on. Wind and TB's yells and something sounds like a million mean and angry

Wind and TB's yells and something sounds like a million mean and angry bees.

We're too heavy and whatever it is drops us onto the deck. TB starts to stand up, but I roll under his legs and knock him down, and before he can do anything, I shove him back down through the pilot dome hole and into the hoy.

Just in time, too, because the thing returns, a black shadow, and sinks its talons into my back. I don't know what it is yet, and I may never know, but nothing will ever take me without a fight.

Something I can smell in the grist.

You are under indictment from the Free Radical Patrol. Please cease resisting. Cease resisting. Cease.

The words smell like metal and foam.

Cease resisting? What a funny thing to say to me. Like telling the wind to cease blowing. Blowing is what makes it the wind.

I twist hard and whatever it is only gets my dress, my poor pretty dress

and a little skin off my back. I can feel some poison grist try to worm into me,

Grist

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but that is nothing. It has no idea what I am made of. I kill that grist, hardly

It doesn't look like a monkey, I don't think, though I wouldn't know.

What are you?

But there are wind currents and there is not enough grist transmission through the air for communications. Fuck it.

"Jill, be careful," says TB. His voice is strained. This thing hurt TB!

I will bite you.

"Would you pass me up one of those gaffs please," I call to the others. There is scrambling down below and Bob's hands come up with the long hook. I

take it and he ducks back down quick. Bob is crazy, but he's no fool.

The thing circles around. I cannot see how it is l'ying, but it is kind of
blurred around its edges, Millions of tiny wings—grist built. I take a longer
look. This thing is all angles. Some of them have needless ome have clayes.
All of the angles are sharp. It is like a black and ved mass of triangles I ying
through the air that only wants to cut you. Is there anybody insince? I don't
think so. This is all code that I am facing. It is about three times as big as me,
but I think of this sea, and developed.

It dives and I am ready with the hook. It grabs hold of the gaff just as I'd hoped it would and I use its momentum to guide it down, just a little too far down

A whiff of grist as it falls.

Cease immediately. You are interfering with a Hierarchy judgment initiative. Cease or you will be—

Crash into the side of the hov. Splash into the Bendy River.

I let go of the gaff. Too easy. That was-

The thing rises from the Bendy, dripping wet.

The thing rises from the Bendy, dripping wet.

It is mad. I don't need the grist to tell me it is mad. All those little wings are buzzing angry, but not like bees any more. Hungry like the flies on a niece of meat left out in the air too long.

Cease.

"Here," says Bob. He hands me a flare gun. I spin and fire into the clump of triangles. Again it falls into the river.

Again it rises.

I think about this. It is dripping wet with Bendy River water. If there is one thing I know, it is the seum that flows in the Bendy. There isn't any grist in it that han't tried to get me.

This is going to be tricky. I get ready.

Come and get me, triangles. Here I am, just a girl. Come and eat me.

It zooms in. I stretch out my hands.

You are interfering with Hierarchy business. You will cease or be end-use eventuated. You will—

We touch.

Instantly, I reconstitute the Bendy water's grist, tell it what I want it to do. The momentum of the triangles knocks me over, and I roll along the deck under its weight. Something in my wrist snaps, but I ignore that pain. Blood on my lips from where I have bitten my tongue. I have a bad habit of sticking it

out when I am concentrating.

The clump of triangles finishes clobbering me and it falls into the river. Oh, too bad, triangles! The river grist that I recoded tells all the river water what to do. Regular water is six pounds a gallon, but the water in the Bendy is thicker and more forceful than that. And it knows how to crush. It is mean

water and it wants to get things, and now I have told it how. I have put a little bit of me into the Bendy, and the water knows something that I know,

It knows never to cease. Never, never, never.

The triangle clump bobs for an instant before the whole river turns on it. Folds over it. Sucks it down. Applies all the weight of water twenty feet deep, many miles long. What looks like a waterspout rises above where the triangle clump fell, but this is actually a piledriver, a gelled column climbing up on itself. It collapses downward like a shoe coming down on a roach.

There is buzzing, furious buzzing, wet wings that won't dry because it isn't quite water that has gotten onto them, and it won't quite shake off.

There is a deep-down explosion under us and the hoy rocks. Again I'm

thrown onto the deck and I hold tight, hold tight, I don't want to fall into that water right now. I stand up and look. Bits of triangles float to the surface. The river quickly turns them back un-

"I think I got it," I call to the others.

der.

"Jill," says TB. "Come here and show me you are still alive."

I jump down through the pilot hole, and he hugs and kisses me. He kisses me right on the mouth, and for once I sense that he is not thinking about Alethea at all when he touches me. It feels very, very good.

"Oh, your poor back!" says Molly Index. She looks pretty distraught and fairly useless. But at least she warned us. That was a good thing.

"It's just a scratch," I say. "And I took care of the poison."

"You just took out a Met sweep enforcer!" Andre Sud says. "I think that

was one of the special sweepers made for riot work, too." "What was that thing doing here?"

"Looking for Ben," says Molly Index. "There's more where that came from. Amés will send more."

"I will kill them all if I have to."

Everybody looks at me and everyone is quiet for a moment, even Bob.

"I believe you, Jill," Andre Sud finally says. "But it's time to go."

TB is sitting down at the table now. Nobody is piloting the boat, but we are

drifting in midcurrent and it should be all right for now. "Go?" TB says, "I'm not going anywhere. They will not use me to make war!

I'll kill myself first. And I won't mess it up this time."

"If you stay here, they'll catch you," Andre Sud says.
"You've come to Amés's attention," Molly Index says. "I'm sorry, Ben."

"It's not your fault."

"We have to get out of the Met," Andre Sud says. "We have to get to the outer system."

"They'll use me too. They're not as bad as Amés, but nobody's going to turn me into a weapon. I don't make fortunes for soldiers."

"If we can get to Triton, we might be okay," Andre Sud replied. "I have a certain pull on Triton. I know the weatherman there." "What's that supposed to mean?"

find anything he would want.

"Trust me. It's a good thing. The weatherman is very important on Triton, and he's a friend of mine."

"There is one thing I'd like to know," says TB. "How in hell would we get to Triton from here?"

Bob stands up abruptly. He's been rummaging around in TB's larder while everybody else was talking. I saw him at it, but I knew he wasn't going to

"Why didn't you say you wanted to go Out-ways?" he said "All we got to do is follow the Bendy ground to Makeneace Century's place in the gas cwampe"

"Who'e that?"

"I thought you knew her, TB. That's that witch that lives in the ditch's aunt I guess you'd call her a smuggler Remember the old Seventy-Five from last your that you got so drunk on?"

"I remember." TB says. "Well she's where I got that from " save Rob "She's got a lot of cate too if

von want one" We head down the Bendy, and I keen a lookout for more of those enforcers but I guess I killed the one they sent this time. I guess they thought one was enough I can't help but think about where I am going I can't help but think about leaving the Carbuncle There's a part of me that has never been outside, and none of me has ever traveled into the outer system. Stray code couldn't go there. You had to pass through empty space. There weren't any

cables out nest Juniter "I thought you understood why I'm here." TB says. "I can't go."

"You can't go even to save your life. Ben?"

"It wouldn't matter that I saved my life. If there is anything left of Alethea. I have to find her"

"What about the wor?"

"I can't think about that "

"You have to think about it!"

"Who save? God? God is a hastard mushroom sprung from a pollution of blood." TB shakes his head sadly. "That was always my favorite koan in seminary-and the truest one."

"So it's all over?" Andre Sud says, "He's going to catch you,"

"I'll hide from them "

"Don't you understand, Ben? He's taking over all the grist. After he does that, there won't be any place to hide, because Amés will be the Met."

"I have to try to save her." The solution is obvious to me, but I guess they don't see it yet. They keep forgetting I am not really sixteen. That in some ways. I'm a lot older than all

ofthem You could say that it is the way the TB made me, that it is written in my code. You might even say that TB has somehow reached back from the future and made this so, made this the way things have to be. You could talk about

fate and quantum mechanics. All these things are true, but the truest thing of all is that I am free. The world has bent and squeezed me, and torn away every part of me that is not

free. Freedom is all that I am.

And what I do. I do because I love TB and not for any other reason. "Ah!" I moan, "My wrist hurts, I think it's broken, TB."

He looks at me, stricken,

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"Oh, I'm sorry, little one," he says. "All this talking and you're standing there hurt."

He reaches over. I put out my arm. In the moment of touching, he realizes what I am doing, but it is too late. I have studied him for too long and I know the taste of his pellicle. I know how to get inside him. I am his daughter, after all. Flesh of his flesh.

And I am fast. So very fast. That's why he wanted me around in the first

Tony Daniel

place. I am a scrap of code that has been running from security for two hundred years. I am a projection of his innermost longings now come to life. I am a woman, and he is the man that made me. I know what makes TB tick. "I'll look for her," I say to him. "I won't give up until I find her."

"No. Jill--" But it is too late for TB. I have caught him by surprise and he hasn't had time to see what I am up to.

"TB, don't you see what I am?"

"Jill, you can't--"

"I'm you, TB! I'm your love for her. Some time in the future you have reached back into the past and made me. Now. So that the future can be dif-

ferent." He will understand one day, but now there is no time. I code his grist into a repeating loop and set the counter to a high number. I get into his head and work his dendrites down to sleep. Then, with my other hand, I whack him on

the head. Only hard enough to knock him the rest of the way out. TB crumples to the floor, but I catch him before he can bang into anything.

Andre Sud helps me lay him gently down.

"He'll be out for two days," I say. "That should give you enough time to get him off the Carbuncle."

I stand looking down at TB, at his softly breathing form. What have I done? I have betrayed the one who means the most to me in all creation.

'He's going to be really hungry when he wakes up." I say.

Andre Sud's hand on my shoulder, "You saved his life, Jill," he says, "Or he saved his own. He saved it the moment he saved yours."

"I won't give her up," I say. "I have to stay so he can go with you and still have hope.

Andre Sud stands with his hand on me a little longer. His voice sounds as if it comes from a long way off even though he is right next to me. "Destiny's

a brutal old hag," he says. "I'd rather believe in nothing."

"It isn't destiny," I reply. "It's love." Andre Sud looks at me, shakes his head, then rubs his eyes. It is as if he's seeing a new me standing where I am standing. "It is probably essential that you find Alethea, Jill. She must be here somewhere, I think Ben knows that, somehow. She needs to forgive him, or not forgive him. Healing Ben and ending the war are the same thing, but we can't think about it that way."

I care about TB. The war can go to hell."

"Yes," Andre Sud says, "The war can go to hell."

After a while, I go up on deck to keep a watch out for more pursuit. Molly Index comes with me. We sit together for many hours. She doesn't tell me anything about TB or Alethea, but instead she talks to me about what it was like growing up a human being. Then she tells me how glorious it was when she spread out into the grist and could see so far. "I could see all the way around the sun," Molly Index says, "I don't know if

I want to live now that I've lost that. I don't know how I can live as just a per-

son again.'

"Even when you are less than a person," I tell her, "you still want to live."

"I suppose you're right." "Besides. Andre Sud wants to have sex with you. I can smell it on him."

"Yes," Molly Index says. "So can I." "Will you let him?"

"When the time comes." "What is it like?" I say.

Grist

"You mean with Andre?" "What is it like?"

Molly Index touches me. I feel the grist of her pellicle against mine and for a moment I draw back, but then I let it in, let it speak.

Her grists shows me what it is like to make love.

It is like being able to see all the way around the sun.

The next day. Molly Index is the last to say goodbye to me as Makepeace Century's ship gets ready to go. Makepeace Century looks like Gladys if Gladys didn't live in a ditch. She's been trying for years to get Bob to come aboard as ship musician, and that is the price for taking them to Triton-a year of his service. I get the feeling she's sort of sweet on Bob. For a moment, I wonder just who he is that a ship's captain should be so concerned with

him? But Bob agrees to go. He does it for TB. TB is so deep asleep he is not even dreaming. I don't dare touch him for

fear of breaking my spell. I don't dare tell him goodbye. There is a thin place in the Carbuncle here, and they will travel down through it to where the ship is moored on the outer skin.

I only watch as they carry him away. I only cry until I can't see him any-

more.

Then they are gone. I wipe the tear off my nose. I never have had time for much of that kind of thing.

So what will I do now? I will take the Bendy River all the way around the Carbuncle, I'll find a likely place to sink the hoy, I will set the ferrets free. Bob made me promise to look after his dumb ferret, Bomi, and show her how to stay alive without him.

And after that?

I'll start looking for Alethea, Like Andre Sud said, she must be here somewhere. And if anybody can find her, I can. I will find her.

There is a lot I have to do, and now I've been thinking that I need help. Pretty soon Amés is going to be running all the grist and all the code will answer to him. But there's some code he can't get to. Maybe some of those ferrets will want to stick around. Also, I think it's time I went back to the mulmvard.

It's time I made peace with those rats.

Then Amés had better watch out if he tries to stop me from finding her. We will bite him. O

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The Black Gods in Search of Their Girl

he history of writing contests in SF is a checkered one. In the fifties. Shasta Press awarded Philip José Farmer's I Owe for the Flesh the promise of publication, then subsequently lost the manuscript and folded. Also in that decade. Frederik Pohl and Lester del Rev were forced to collaborate under the pseudonym Edson McCann to produce Preferred Risk (1955) as the rigged winner from among feeble entrants in a Galaxy magazine contest. And of course the Writers of the Future competitions, while uncovering many fine authors such as Robert Reed, Dave Wolverton, and David Zindell, have not been without their share of controversy.

Now comes the Warner Aspect First Novel Contest, whose winner is Nalo Hopkinson with her book Broum Girl in the Ring (trade, 8; 12.99, 250 pages, ISBN 0-446-67433-8). I can happily report that the contest jinx is broken. Hopkinson's novel is an accomplished blend of Caribbean culture and folklore with futuristic streetlife. Compressed into a short span of time—three days stuffed with life-altering events—Broun Girl boasts horripilating chills, begulling characters, and inventive language.

The time is the near future. Canada, having undergone social and economic disruptions, has abandoned the devastated core of Toronto, the Burn, to squatters and criminals, orphans and helpless families struggling just to survive. Many of the dwellers in the Burn are of Caribbean descent, and it is their vital speech and folkways that occupy cen-

ter stage. Head of the criminal element is the satanic Rudy Sheldon. who has scrambled to the top through an alliance with the darker elements of the Caribbean pantheon. the all-ton-real orighes who manifest under a dozen names from Africa to Haiti, from Florida to Brazil, Rudy's main ace: a murderous captive spirit called a duppy who terrorizes the populace, Ranked against Rudy and his mortal henchmen are three seemingly helpless women, grandmother Gros-Jeanne, mother Mi-Jeanne, and daughter Ti-Jeanne. The latter character is our heroine, through whose eves most of the narrative will unfold.

Ti-Jeanne is a reluctant understudy to her grandmother's mysteries. Recently delivered of a nameless infant she half-disdains, uncertain of her goals in life, she wants nothing more than a good home and husband. But the burgeoning evil of Rudy—who is soon revealed to be her own grandfather—comes between Ti-Jeanne and her dreams, forcing her to confront the Dorian-Grayish sorcerer in a re-enactment of a timeless battle.

or a timeless partie.

Beyond the enthralling story, Hopkinson's main achievement is her effective use of authentic patois to convey Ti-Jeanne's personality and worldview. Take this instance, when a demon materializes.

A fireball whirl in through the window glass like the glass ain't even there. It settle down on the floor and turn into an old, old woman, body tusist-up and dry like a chew-up piece of sugar cane. She flesh red and wet and oozing all over, like she ain't have no skin. Blue flames running over she body, up she arms, down the two cleft hooves she have for legs, but it look like she ain't even self feeling the fire.

Soon the reader becomes immersed in this fresh and vivid manner of talking and thinking, and Ti-Jeanne and her family assume full exotic weight. In this family portrait (and in her title, I think), Hopkinson harks back to that landmark work of realism by Paule Marshall, Brown Girl. Brownstones (1959).

Quietly revolutionary in its focus and execution, Hopkinson's first book promises plenty of duppy-conquering, calvpso magic ahead from this new talent.

A Shropshire Lady

Another outstanding first novel arrives hard on the heels of Hopkinson's: The Iron Bridge (Harcourt Brace, hardcover, \$25,00, 440 pages, ISBN 0-151-00259-2), by David Morse, Like the inverse of de Camp's Lest Darkness Fall (1941), blended with Benford's Timescape (1980) and Jack Finney's Time and Again (1970), Morse's hefty, seductive, leisurely paced tale concerns a ruined future, a historical turning point, and the movers and shakers and average souls caught up in powerful cultural and technological tides.

Earth in the year 2043 is a dving organism, raddled with radiation, toxins, and viruses, its biosphere and the bodies of its human and animal inhabitants corrupted by three centuries' worth of relentless, shortsighted industrialism. In a small enclave of ecologically minded refugees from civilization called Ecosophia, a young orphaned woman named Maggie Foster is at the heart of a daring experiment. Possessing the ability to timeslip by mental meansan ability accounted for by a new physics paradigm-Maggie consents to be sent back to England in the year 1773, there to attempt to sabo-

tage the bridge of the title, the first such all-iron structure, an engineering triumph seen by the citizens of 2043 as the deadly initial step on the road to technological hell. Arriving in 1773 naked, with only her knowledge of history and a few scientific insights as weapons, Maggie must immediately go native, hoping to insinuate herself among the foundryowning families responsible for the construction of the bridge over the Severn River, thence to thwart it by unknown strategies.

Maggie eventually ends up as a servant in the household of Abraham Darby, Quaker proprietor of several foundries which, along with those of an in-law, account for a third of the iron produced in England, Rival to Darby is John Wilkinson, an engagingly amoral Falstaffian figure who connives and strives endlessly to advance his own glory. Amidst these vividly portrayed individuals, Maggie moves, tentatively at first, then with more assurance. Gradually she finds that facets of her assumed role are becoming reality. Through intricate machinations, risking her own life, Maggie undergoes a seachange in her identity and ideals. By the novel's end, history and Maggie have indeed both been altered-but not in the exact manner desired by the Ecosophians, Left much wiser than when she began, Maggie has found a home she never had, herself acting as a bridge between the naïveté of 1773 and the cynicism of 2043.

Except for very brief flashbacks, all of Morse's story is set in eighteenthcentury Shropshire. Yet the novel never becomes a simple historical piece. Splitting his narrative among three points of view-Maggie's, Darby's, and Wilkinson's-Morse never loses sight of the blasted world of 2043 or the chronoparadoxes they have engendered. Yet his accomplished portrait of Fielding-era England is also meticulous and enchanting. Riffing on the rich meaning of steam and iron for our society, Morse boldly ventures back a century further than most steampunk writing, which seems fixated on the High Victorian era. Mostly maintaining a gentle voice similar to Lisa Goldstein's or I an MacLeod's, Morse will occasionally burst into a welcome gonzo interfuck, such as the dope-smoking seene among Wilkinson, Josiah Wedgewood, and Brasmus Darwin.

With Biblical overtones of both Genesis and Revelations, filled with captivating personalities, both sanguine and sad about humanity's nature, Morse's The Iron Bridge should stand proudly for a good long time.

The Wizard of Oso If Howard Waldrop did not exist,

SF would have to invent him. Here's a writer who exemplifies so keenly the non-linear, lateral thinking typical of the best SF that his name deserves to become a common noun or verb relating to fantastication: "I read the most marvelous waldrops recently." "Nbodby waldrops like him." Combine this man's crazy wisdom, his Lafferty-ish, Davidsonian perceptions with an extreme dedication to the sheer craft for writing, and you have a unique treasure, a writer whom the nation should endow with a perpetual stipend for interrity and mastery.

tegrity and mastery. Unfortunately, the marketplace has not been as kind to "Howard Who?" as he deserves. Having relocated from his longtime base in Austin, Texas, to the fish-rich hinterlands of Oso, Washington, Waldrop continues to be bedeviled by finances. or lack thereof. In his latest collection, Going Home Again (St. Martin's Press, hardcover, \$20.95, 222 pages, ISBN 0-312-18589-8), Waldrop shares -in his dueling introduction (another by Lucius Shepard comes first) and in his story afterwords-both his inspirations and travails. These

asides convey as sharply as possible the realities of a writer's marginal life in contemporary America, and, with the concluding career bibliography, provide a valuable resource for scholars and general readers.

But these ancillary materials pale in comparison to the stories themselves. This might be Waldrop's strongest collection yet.

The first three pieces are "straightforward" alternate histories, each with an author at its center. "You Could Go Home Again" finds the elder Thomas Wolfe with his life beneficently extended, but his vaunted memorythe basis of all his art-cruelly curtailed. This perfect twist of irony is so typical of Waldrop, who has the knack of choosing just such supremely resonant fates for his historical characters, "Household Words . . . finds Charles Dickens inhabiting a Victorian world that might have resulted from a Sterling/Gibson collaboration. And "The Effects of Alienation" has actor Peter Lorre laboring in the shadow of world-conquering Nazis and under the even more demanding aura of recently deceased playwright Bertolt Brecht.

The remaining six stories inhabit territory more sly than "simple" uchronias. While not contravening facts, they blend fiction, myth and history into such a head-spinning mix that all of existence seems enchanted. If I mention that "Flatfeet" is Lovecraft conflated with Nathanael West and Oswald Spengler, or that "The Sawing Boys" fuses Grimm with Damon Runyon, you might get some pale idea of the effects Waldrop is after-and which he magnificently achieves. And certainly only Waldrop the holy blasphemer would dare to mix Hugo Gernsback with Disney's throwaway character Bucky Bug, as we see him doing in "Scientifiction," a gem recently found in the pages of this magazine.

Besotted with America, snug in his

waders and thigh-deep in the river of narrative, Howard Waldrop snags mighty, record-setting stories out of the flux, and plops them all fricasseed on your plate.

Fighting Words

Some years ago I had the rare privilege of sharing several hours of stimulating conversation with Tom Disch, our transcribed and edited talk later appearing as an interview in the pages of Science Fiction Eye. Reading his new critical history of SF and its intersection with the larger culture. The Dreams Our Stuff Is Made Of (Free Press, hardcover, \$25.00, 256 pages, ISBN 0-684-82405-1). I had the sense once again of sharing a cozy parlor with this erudite bear of a writer. His new book is less an academic, footnoted thesis than a jazz-structured, freeranging sax solo evoking in alternating passages the elation and blues of a seasoned SF writer. And boy, is this jam session going to evoke some howls from the SF audience!

Disch's central contention—seen in the book's subtitle, "How Science Fiction Conquered the World"-is that science fiction and society are locked in a two-way feedback loop. Our special brand of literature shapes the way we deal with the world, and then the mundane demands of the world warp the literature, and so on forever, in an Ourouboros circuit. Now, this would not be an especially contentious proposition, except that Disch believes much of contemporary society and culture is pernicious, soul-destroying, misguided trash, and that SF bears a large share of the culpability for rendering life and art down to their lowest common denominator.

In ten feisty chapters Disch surveys America's current state of religion, ethics, political correctitude, militarism, and ethnic prejudice, and charts how many of our attitudes derive from famous SF novels and stories and then flow back into the genre. His aims and larger perspective are unique in the history of SF criticism, calling to mind only the limited examples of a few earlier essays by Russ and Delany. His illustrative icons range from Doc Smith and Heinlein to Greg Egan and Mark Leyner, from Ronald Reagan and Oliver North to Andrea Dworkin and Hillary Clinton.

Although one may choose to differ calmly with Disch's thesis-personally, I find much to commend and a few sticking points (see below)-his Menckenish way with a cutting characterization is what's bound to anger folks. Ray Bradbury is "a lifelong child impersonator of a stature equal to that of Pee-Wee Herman." Orson Scott Card is "the Edgar Rice Burroughs of Generation X." Generally speaking, the writers Disch cites are already in the dock and under indictment, if not collared with hemp. His paeans to Joe Haldeman and Hal Clement stand out as rare blessings.

A few factual errors surprisingly creep in. They range from the minor ("H. R. Geiger" instead of "Giger") to the egregious (splatterpunk is in no way one of the flavors of cyberpunk) to the possibly deliberately misleading (Disch praises Heinlein for once featuring a black protagonist, but then obscures the fact that the book in question is Starship Troopers [1959], which he has already excoriated). But my main hesitancy about fully endorsing Disch's valuable and stimulating Godzilla tromp through the field is that between his gory toes slips all the SF that is truly valuable and praiseworthy. Although he tackles this omission in his introduction, the resulting imbalance is still palpable. Why omit such an admired writer as John Crowley (true, more of a fantasist than a hardcore SF figure), if by explicating him and his work one could have illuminated a

positive aspect of modern life, such as the not insignificant attempt by many ordinary people to strike a balance between the burdens of history and the demands of the present? This volume demands a compen-

atory companion from Disch. Then we and the field we love would be rendered whole.

Kids' Stuff

Every December Scientific American runs a special feature reviewing new science books aimed at young readers. I've always admired this annual focus on books that could serve as an entrypoint into a lifetime of enjoyable and enlightening reading, and often thought that SF should have a similar roundup, especially considering the problems presented by the graying of its current audience. While my selection below is by no means exhaustive, I hope it's at least a move in the right direction, addressing a perhaps underserved portion of the audience. Buy these books for that bright son or daughter, niece or nephew, granddaughter or grandson.

All these titles come from William Morrow & Company, some under their various imprints, such as Mulberry, Greenwillow, and Books of Wonder. Together, they constitute an impressive juvenile and YA list.

Youngest readers will certainly have their minds expanded by the instructional astronomical books of Seymour Simon, who has written over 150 of them. (The arena of kids' books holds numerous prolific authors unknown to even a well-read SF fan.) Featuring some of the astonishing color images derived from the Hubble Telescope and various planetary missions, these books introduce youngsters to the marvels of the Solar System and the cosmos at large. In Destination: Jupiter (hardcover, \$16.00, unpaginated, ISBN 0-688-15620-7), the gaudy gas giant and its moons emerge as clearly as

your friendly next-door neighbor. The Universe (hardcover, \$16.00, unpaginated, ISBN 0-688-15301-1) has a harder time of being comprehensive, since the scope of Simon's topic is the impossibly large one of "everything that exists, now and in the past.' Still, the basic large-scale organization of the cosmos is laid out in fine fashion, and a few of its more colorful denizens-black holes, quasars-are trotted forth for their "star" turn. A couple of images, including the back cover, are not identified, which might cause some perplexity in parent and child alike, but otherwise Simon labels everything with precision. Three fantasies for the same age

group will be sure to entrance, amuse, and even chill.

The first is Harvey Potter's Balloon Farm (paper, \$4.95, unpaginated, ISBN 0-688-15845-5), with text by Jerdine Nolen and illustrations by Mark Buehner. In an anonymous southern town, a young black girl befriends farmer Potter, whose crop is colorful halloons that sprout like corn on his magical farm. The first-person narrative Nolen fashions for the protagonist is lively, funny and meditative, ending with a delightful twist. Buehner's drawings are lollipopbright, witty, and utterly believable. syncing perfectly with the text. Whether you see a field of multicolored shaped balloons on green stalks from the air or from eve-level, it's a sight you are not likely soon to forget.

From 1973 comes the reissue of King Stork (hardcover, 48 pages, ISBN 0-688-15813-7). A fairytale by Howard Pyle from his The Wonder Clock (1888) provides the text, which is then brought to extravagant life by artist Trins Schart Hyman. Possessing Sendakian beauty and emotional depth, this collaboration tells the story of an itinerant musician who attempts to win the hand of a blackmagic-using princess with the help of the friendly stork sovereign. Hyman depicts the severed heads of the failed suitors and the half-covered bosom of the cruel princess with unflinching zest, and the final image of the handsome musician's triumph conveys a bittersweet tinge.

When writer Marianna Mayer chose to research the myth of Pegasus and Bellerophon, she went not to diluted milguetoast sources, but to the potent exegesis of Robert Graves. The resulting tale, Pegasus (hardcover, \$16.00, unpaginated, ISBN 0-688-13382-7), with drawings by Kinuko Craft, reflects the almost otherworldly ambiance of a Greece that perhaps never was. With Pre-Raphaelite splendor, Craft uses single- and double-page spreads to bolster Mayer's potent tale of heroic man and winged horse teamed in battle against the ghastly Chimera. Sometimes reminiscent of the work of Gervasio Gallardo, these subtle and stirring images will surely lure many a reader into the land of fable.

For an older reader, consider Dinosaur Habitat (hardcover, \$15.00, 96 pages, ISBN 0-688-15324-0), written by Helen Griffith and containing black-and-white interior illustrations by Sonja Lamut. Two mildly antagonistic brothers-twelve-year-old Nathan and pesty eight-year-old Ryan-suddenly find themselves inexplicably inhabiting Ryan's own terrarium, once stocked with plastic dinos who have now come alive. Their survival among the giant reptiles in doubt, the brothers struggle to find a way home, out of the magic terrarium. While Griffith is scientifically stringent about the appearance and nomenclature of her Jurassic fauna and flora, her dinos do exhibit some anthropomorphic qualities more Disneyish than otherwise. Pair this book with Greg Bear's Dinosaur Summer (Warner Aspect, hardcover, \$23.00, 325 pages, ISBN 0-446-52098-5) for a more balanced presentation of our thunder lizard pals.

The recent rediscovery of E. A. Wyke-Smith's charming children's fantasy The Marvellous Land of Snergs (1928) is now matched by another unearthing. Back into print comes Johnny Gruelle's The Magical Land of Noom (hardcover, \$22.00, 158 pages, ISBN 0-688-14117-X). First appearing in 1922, Gruelle's fable retains a zippy surreal élan sure to fascinate anyone who has ever happily taken a seat at Alice's Tea Party. (Had this book been prominent in the sixties, Jefferson Airplane would have written a song about it.) Artist and writer, Gruelle-who lived from 1880 to 1938 and is best known as the father of Raggedy Ann-dashes headlong through the adventures of Johnny and Janey and their grandparents on the backside of the Moon, where rubber rivers and flying boxing gloves are the least of the wonders. The innocent elation and verve of the characters is particularly charming. making the text read like Andrew Lang crossed with Fontaine Fox (of Toonerville Trolley fame). And Gruelle's gorgeous color illustrations supplement scores of antic line drawings. A rare and radiant find.

Any Port That Charms

I've been reading Jack Vance's books for thirty years, and I'm still discovering new aspects to his work. Rather than chalk that up to my own slow-wittedness, I prefer to believe that this long-term voyage of edifying discovery is attributable to the depth of Vance's writing.

Enjoying his latest, Ports of Call (Tor, hardcover, \$24.95, 300 pages, ISBN 0-312-55801-9), I realized for the first time that Vance is one of the few fantasy writers these days who exhibit a definite kinship to that nonpareil, Mervyn Peake. Consider this description, and see if it couldn't have come from an unwritten chapter of Gormenbast (1950). She walked with long strides, head thrust forward, like a rapacious animal on the proul. Her wild mass of mahagany-red hair framed a pale hollow-cheeked face. Her black eyes were surrounded by small creases and folds of skin, like parrot's eyes, and her long-bridged nose terminated in a natable hook. It was a striking face, the mouth jerking and grimacing, the parrot's eyes snapping, her expression shifting to the flux of emotions.

The character being detailed is Dame Hester, eccentric aunt to a young man named Myron Tany. Bedazzled by the wonders of the Gaean Reach, Myron cajoles his rich aunt into a space voyage whose ultimate destination is a mysterious spa promising literal rejuvenation, a prize the aging Dame Hester yearns for. But all does not go well for Myron: he is ejected from the crew just a few stops onward by his irate aunt, granted only enough money to slink ignominiously home. Does he? Of course not, being a purely Vancian plucky lad. Myron signs on with the tramp freighter Glicca, a ship manned by three charming rogues, wry Captain Maloof, philosophical chef Wingo, and gambling engineer Schwatzendale. Their subsequent adventures, alternately hilarious and eerie, fill Ports of Call with a cargo of enjoyment.

Unlike Vance's recent books-Night Lamp (1996), say—revenge for cruelty and the righting of wrongs are not the central topics. This book is lighter, positively Wodehousian in parts, and reminds me of Big Planet (1957) and Showboat World (1975). True, plangently melancholy moments such as the death of a murderous barmaid on the planet Terce intrude. But for the most part, this meandering voyage from one exotic culture to another is pure excitement for Myron and readers alike. (But Vance slyly undercuts both Myron's and our expectations by making the very first port of call be the dullest place imaginable!)

Readers should be warned that no closure is achieved in this novel, the first of a series. But as Captain Malor assures Myron on the final page: "Out among the back-islands, myscries their settill ablied. Good luck to us all." And the best of luck to Vance himself, that he continue to charm us for many years yet to come.

Dreaming Awake

Jonathan Lethem's hard-edged Girl in Landscape (Doubleday, hard-cover, \$22.95, 260 pages, ISBN 0-385-48518-2) represents not a total departure from his previous books, but rather a deliberate selection and intensification of certain aspects of his writing. It's narrower in focus than earlier capacious baggy-pants works of his, driving an archetypal story single-mindedly toward its harsh yet hopful conclusion.

On a wasted Earth, the dysfunctional Marsh family-father Clement, mother Caitlin, daughter Pella (our point of view), and sons Raymond and David-are preparing to emigrate to the recently discovered Planet of the Archbuilders. Just before departure, tragedy strikes in the form of a brain-tumor discovered when Caitlin collapses one day. The mother's subsequent death informs the diminished family's entire tenure on the alien world. There, adolescent Pella must confront a welter of confusing challenges. Her own burgeoning womanhood: the rivalries and disappointments and schemes of her fellow colonists, particularly embodied in the unwelcome attention from bossman Efram Nugent; the enigma of the aliens known as Archbuilders: and the disintegrating personalities of her relatives. With her own mind being altered by a resident virus (the virus brings fugue-like states of reverie in which the human victim shares the sensorium of a native creature known as a household deep; Pella struggles to impose some kind of sense and justice on her landscape. (The presence of an artist in the colony—Hugh Merrow, who figured in a previous Lethem story bearing his name—clues us to the painterly snapshot nature of this tale, whose title could well adorn an enigmatic canvas.)

Lethem's homage to the iconic Phil

Lethem's homage to the roome Phil Dick emerges here not in any reality-twisting hijinks, but rather in the despairing, gritty nature of his colony, reminiscent of the Bleekmen-haunted Mars of Martian Time-slip (1964) fused with the Can-D-laced Mars of The Three Stigmata of Palmer Eldrich (1965). Readers of Palmer Eldrich (1965) will also recognize the inexplicated fullity of the whole otherworldly enterprise.

The overall tone of Lettlem's book is not Mabokovian, as the jacket publicist would have us believe, but rather harks back to such James Cain novels as The Butterfly (1947), with its mubil backwoods girl struggling against natural impulses and human predators. Additionally, a Faulknerian atmosphere of destiny in the dust prevails.

Deeply etched, more victor than victim, in the final analysis Pella Marsh dominates her landscape, rather than let her background swamp the rugged individuality with which Lethem has masterfully endowed her.

As Barflies to Wanton Boys Are We to the Gods

The irrepressibly ockeyed William Browning Spencer, crafty creator of Zod Wallop (1995), returns with a new novel that features an almost identical mix of characters and themes as his last book: no bad thing, when done this well. In the manner of Tim Powers and James Blaylock, two authors his style and concerns recall, Spencer has a fa-

vorite troupe of actors and some abiding concerns and questions about the human existential dilemma. Mixing up his preferred faces, foibles, and fears in subtly differing proportions, Spencer probes relentlessly at the sore tooth of mortality from book to book.

Irrational Fears (White Wolf, hardcover, \$19.99, 296 pages, ISBN 1-565-04915-2) occurs mainly at the New Way Alcoholism Treatment Facility. Undergoing therapy at this most unconventional of detox farms is one Jack Lowry, professor of literature whose incipient alcoholism has blossomed under the pressure of the murder of his friend Sara Janson by her jealous husband. Lowry's fellow patients are an oddball lot, all depicted in bold, funny, empathetic strokes. One of them, a forlorn badluck teenager named Kerry Beckett, immediately exerts a powerful hold on Lowry's heart. The tentative, jagged love-affair between Lowry and Beckett is the major thread from start to finish in this story. But Spencer's crazyquilt narrative is embroidered with major complications and observations.

The primary roadblock to the happiness and recovery of Lowry and his fellow whimsically cynical, wisecracking patients (as well as to a whole nation of AA participants) is the existence of an organization known as the Clear. Headed by a vengeanceseeking, Lovecraft-besotted madman named Dorian Greenway, the Clear would be no more than a minor annoyance were they not fueled by access to genuine psychic power. Gates to Hell, mirror-worlds, diabolical killer toilets, and narcotic Gummy Bears are just a few of the Clear's weapons. Arrayed against them are Lowry and his quirky allies, who must wage mortal battle while simultaneously struggling with their own energy-sapping defects.

Spencer has the cold realities of al-

coholism and the various recovery movements (old-fashioned and New Age) nailed down tighter than a submarine's hatch. Keenly observant. conversant with every self-delusional shuck and live Spencer is both mercilessly unsparing and earnestly sympathetic, Lowry and his fellow sufferers emerge as ragged knights questing for a grail of sobriety in a marketplace of profiteering gurus. (Toward the book's end, Spencer approaches David Prill levels of satire with his Whole Addiction Expo. "a Woodstock for the nineties.") Identifying such modern annovances as "unconditional-love harassment." Spencer makes you laugh through your tears.

Lowry observes, "The smooth and easy answers always pushed the awkward, struggling questions into the shadows." Spencer peels back those shadows for our enlightenment.

> Pippa Surpasses ard Grant has don

Richard Grant has done something I would have sworn was impossible. With his new novel. In the Land of Winter (Avon, hardcover, \$24.00, 340 pages, ISBN 0-380-97465-7), he has brought a Frank Capra movie to the printed page, updated for our tumultuous decade. Without being cloving or wearing rose-colored spectacles, Grant tells in relatively unornamented yet precise and affecting language a story of simple, good-hearted folks arrayed against bigoted, authoritarian figures, a story in which good emerges victorious over evil, albeit after a few bruising concussions and some needful rubbing of noses in the mire of reality. The fact that the humble souls we are rooting for are werewolves. weirdos, and witches in no way detracts from readerly identificationa measure, I guess, of how far our society has indeed come from the Jimmy Stewart era.

Pippa Rede (a name meant to evoke

both Astrid Lindgren's Pippi Longstocking [1945] and Robert Browning's sentimental poem "Pippa Passes" [1841]) is a single mother, aged twenty-eight, living in a small Maine town with her daughter Winterhelle Pinna professes a heartfelt but sleepy adherence to Wiccan practices, and has raised her daughter in the Goddess nath, Mainly, however, Pippa keeps a low profile, content to coast along at her dead-end job and to endure living with her contumacious Aunt Eulace. rather than push herself to achieve more. Her stalled, unquestioning life, however, is given a severe jolt when zealous social workers arrive to take Winterbelle away, citing ritual Satanic abuse, a charge that could not be further from the truth. Occupying the weeks surrounding Christmas. this tale shows how great trials can strengthen the soul, refining beliefs only faintly held into something much more vital and nourishing.

Grant, a Downeaster himself. evokes the semi-rural ambiance of Pippa's Maine village huddled at the base of Wabenaki Mountain with consummate skill. The locals-from the egotistic publisher of the regional paper, to an idealistic lawyer, to Pippa's loopy fellow witches-all emerge as vital human beings. Pippa is Grant's deepest creation, onstage on every page. Her transformation from helpless wimp to avenging angel is believable and exciting. Grant is commendably evenhanded with his villains, too, and in scenes where Pippa's allies spout dogmatic nonsense, the balance between the two camps is restored to equilibrium.

This book echoes in its attitude and emotional punch the work of Diana Wynne Jones. Roald Dahl, and Joan Aiken, as well as Leiber's Conjure Wife (1953), and shows that old themes under a new hand are as eternal as day and night. To distort Browning: "Grant's in his studio—/All's right with the world!"

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SF CONVENTIONAL CALENDAR

ots of con(vention)s this month. WorldCon news next time. Plan now for social weekends with your favorite SF authors, editors, artists, and fellow fans. For an application of con(vention)s, a sample of SF folksongs, and into on fanzines and clubs, and how to get a later, longer list of cons, send me an SASE (sand-dressed, stamped #10 [business] envelope) at 10 Hill #22L. Newark NJ 07102. The hot line is (973) 242-5999. If a machine answers (with a list of the week's cons) leave a message and fill call back on my nickel. When writing cons, send an SASE. For free listings, tell me of your con 6 months out Look for me at cons as Filithy Pierre, playing a musical keyboard.—Erwin S. Strauss

OCTOBER 1998

23-25 - MilleHCon. For Info, write: Box 101322, Deriver CO 80250. Or phone; (303) 657-5912 (10 Aut to 10 Pu, not collect). Con will be held in Lakerood CO (61 to) mittled, same as in address) at the Sheration. Guests will include: Lawrence Watt-Evans, Ellisa Mitchell, Lawrence Krauss, Camille Cazdessus, L. E. Modesitt Jr.

- 22-25-Int'l. Camarilla Conclave. (AOL) jduda. Airport Hilton, Salt Lake City UT. Live-action vampire role-playing.
- 29-Nov. 2.—VampyreCon. (212) 529-7979. Ramada Palace, New Orleans LA. 96 Hr. of Darkness. Anne Rice Coven Ball 30-Nov. 1.—World Fantasy Convention. (360) 943-9483. Doubletree, Monterey CA. F. Robinson, Literary dark fantasy.
- 30-Nov. 1-BardCon. New Hall, King Edward VI School, Stratford-on-Avon UK. A. & R. Robinson, Alaimo. Media.
- 30-Nov. 1—Vulkon. (954) 434-6060. (AOL) joernotes. Cleveland OH. Marina Sirtis. Star Trek commercial event. 30-Nov. 1—TypeCon. (508) 643-2247. Marriott. Westborough MA. For afficionados of typography and fine printing

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1—Halloween98, (E-mail) halloween@eventainc.demon.oo.uk. Sports Cantre, Basildon UK. Murro, Prowsa. Hortorineda.
6-8—SetCon, Box 9434, Hampton V4 23670. (757) 930-2301. Holdsy in Executive, Virginia Beach V4. Shetterly, Bull.

- 6-6—Seldon, Box 9434, Hampton NA 2870. (757) 980-2201. Holdoy inn Executive, Virginia Beach VA. Shiriterit, Bull. 6-8—TusCon, Box 28822, Tucson AZ 85726. (520) 881-3708. Executive Inn. Schorhagen, E. Michell, E. Byarth Hamall. 6-8—Primedia, 1403 King St. #33, Weston ON MRN 3877, (905) 820-3844. Radisson East, Toronto ON Koeng, R. Green. 6-8—Dittles. Box 1010. Framinshaham MA 01701. (E-maill distributed Jazz. Harbor Hotel & Marina Newson RI. Faccines.
- 13–15—Phillon, Box 8303, Philadelphia PA 19101. (215) 957-4004. Adams Mark Hotel. Walter Jon Williams. Since 1936.
- 13-15-WindyCon, Box 184, Palatine IL 60078. (708) 383-6948. Hyatt. Schaumburg IL. Steele, Fogio, Lyn-Waitsmans. 13-15-TropiCon, 539 37th, W. Palm Beach FL 33407. (561) 844-6336. Doubletree Suites, Ft Lauderdale FL. N. Gaiman.
- 13-15—SoonerCon, Box 882887, Oklahoma (Dir OK 73188, (465) 785-1100. Clairon. Bova, Kevin Murphy, Sephen Pagel, 13-15—OryCon, Box 5703, Portland OR 97228. (933) 283-0802. Doubletree. Bujold, Waldrop, Asher, Koja, Langirdr 13-15—FairPolmt, 6999 Hurri Club Rd., Elikridge MD 21227, (410) 579-1257. Omn.) Baltimore MD: O'Reiby, Furst. Trek.
- 13-15-NovaCon, 14 Park St., Lye, Stourbridge DY9 8SS, UK. (0138) 482-5386. Abbey, Great Malvem: Paul J. McAuley 20-22-Linited Fan Con. 500 Monroe Turmille Monroe CT 06458 (781) 986-8735. Marriett Socionidad Má. Ster Tol
- 20-22—United Fan Con, 500 Monroe Turnpike, Monroe CT 06468. (781) 986-8735. Marriott, Springfield MA. Star Trek. 20-22—ArmadaCon, Box 38, Plymouth Devon. PL3 5HL, UK. (01752) 267-873 or 812-598. Coptionne Hotel.
- 21—Convencitoes Estelar, Box 14592 CEP, Seo Paulo 05998370, Brazil. (11) 8941-4442. (E-mail) ddb@uol.com.br. Sar Trek. 21-22—VullKon, 12237 SW 50th St., Cooper City Ft. 33330. (954) 434-6060. Atlania GA. Marina, Siriis. Star Trek.
- 21-22—Creation, 664A W. B'way, Glendale CA 91204. (818) 409-0960. Hitton, Burbank CA. Commercial Babylon 5 event.
- 21-22—Best of Both, Box 215, Forestville NSW 2087, Australia. (612) 9493-0290. Masonic Centre, Sydney. Trek and B5. 21-22—Petadon. 87 Moretons Pt., Pitase SS13 3NA, UK, Soorts Centre, Basildon UK, Baker, McCox, Aldred, Dr. Who.

NEXT ISSUE Well, we start the new year off with a bang next issue, as Allen Steele returns to

JANUARY COVER STORY

these pages with our January cover story, a slambang seguel to his famous Hugowinning story from 1995, "The Death of Captain Future." In this one, the mantle of Captain Future has been passed on to his hapless former crewmember, Rohr Furland, who, to his dismay, finds himself also tagged with that moniker as wellso that to the population at large, he is Captain Future, two-fisted Hero of the Spaceways, "the supreme foe of all evil and evildoers." A reputation like that is hard to live up to, though, as Furland discovers when he finds himself blackmailed into accepting a suicide mission to the hostile planet Venus, and finds himself plunged into a headlong, spine-tingling, pulse-pounding, throw-'em-out-the-airlock, good old-fashioned pulp Space Opera adventure, complete with monsters, mutants, and murderous thuos, with a revolution in the works that could turn everything on Venus upside-down, as Furland races to discover "The Exile of Evening Star"-and somehow get back alive! This one is a huge amount of fun. so don't miss it. The cover is by multiple Hugo-winner Frank Kelly Freas.

Acclaimed writer S.N. Dver returns with a wry and clever study of things that

have survived well past their time, and of various sorts of obsolescence, in "Original Sin": the popular David Marusek, author of the well-known story "We

TOP-FLIGHT WRITERS

Were out of our Minds with Joy," offers us a funny and bitingly sly look at fame and what it takes to make your name live forever, in (go ahead-say it several times!) "Yurek Rutz, Yurek Rutz, Yurek Rutz"; Lois Tilton makes a powerful Asimov's debut with a harrowing demonstration of how societies always read what they sow (and then have to somehow deal with the consequences), even if it's a crop of "Dragon's Teeth"; Nisi Shawl returns with a lighthearted look at a hard-headed young girl who's capable of taking charge of even the strangest of situations, in a whimsical and funny study of "The Pragmatical Princess"; and new writer Richard Wadholm makes a brilliant Asimov's debut (and his very first sale) by taking us to the furthest reaches of the Solar System, to the frozen, desolate surface of Pluto, for a surprising survey of the very, very weird inhabitants of "The Ice Forest"-and the danger they represent to every other living thing, and, in fact, to the entire fabric of reality itself!

EXCITING Robert Silverberg's "Reflections" column, in an appreciative mood, urges, "Let's Hear It For Neanderthal Man": and Peter Heck brings us "On Books": plus an **FEATURES** array of cartoons, poems, letters, and other features. Look for our January 1999 issue on sale on your newsstand on November 24, 1998, or subscribe today (you can now also subscribe electronically, online, at our new Asimov's Internet website, at http://www.asimovs.com-and keep in mind, a subscription to Asimov's makes a great Christmas gift, too!), and be sure that you miss none of

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the great stuff we have coming up for you in 1999! Another year of Cutting Edge, Top-of-the-Line, State-of-the-Art stories by L. Timmel Duchamp, R. Garcia v Robertson, Brian Stableford, Robert Reed, Eleanor Amason, Michael Swanwick, Rick Shelley, Esther M. Friesner, Kage Baker, Eliot Fintushel, William Barton, Tom Purdom, and many others, Subscribe, and see for yourself why Asimov's has won the Locus Poll for Best Magazine an unprecedented eleven years in a row. Find out for yourself why Locus has said of us: "Asimov's is still the cutting edge of short fiction. The level of writing is astonishingly high-probably the best in or out of the genre. A healthy portion of the best American short fiction is probably published here." Or why the Austin Chronicle called Asimov's "the most innovative and consistently readable magazine on the newsstand today." Or why we placed more stories on this year's Final Hugo Ballot than all of our other competitors combined. So subscribe today, and make sure that you don't miss any of next year's most memorable stories!

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